DOCUMENT RESUME

ED 191 252 EC 130 194

AUTHOR	Davis, Sharon A.: And Others
TITLE	Needs Assessment for Inservice Education: Building Local Programs.
INSTITUTION	ERIC Clearinghouse on Handicapped and Gifted Children, Reston, Va.
SPONS AGENCY	National Inst. of Education (ED), Washington, D.C.
PUB DATE	Aug 80
CONTRACT	400-76-0119
NOTE	68p.: ERIC Exceptional Child Education Report Series, IAP No. 79-3.
AVAILABLE FROM	ERIC Clearinghouse on Handicapped and Gifted Children, The Council for Exceptional Children, 1920 Association Dr., Reston, VA 22091 (Free while supply lasts).
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Check Lists: *Disabilities: *Evaluation Methods: *Inservice Teacher Education: Mainstreaming: *Needs Assessment: Program Development: Self Evaluation (Groups): Surveys: Teacher Workshops

ABSTRACT

The monograph addresses issues in needs assessment for the inservice education of teachers of handicapped children. Chapter 1, "Self Diagnosis Regarding Needs Assessment" (M. Walker), emphasizes the importance of local personnel involvement and provides a checklist for readers to assess their knowledge on the context, methodology, and application. G. Kuh, in "The State of the Art of Needs Assessment in Education," defines the concept and related operational issues and answers 15 questions which should be asked when planning and conducting a needs assessment. S. Davis ("Planning and Conducting A Needs Assessment") examines steps in the process, describes strategies for data collection, and reviews considerations for selecting such strategies as interviews, observations, the Delphi technique, and group process techniques. "Needs Assessment in Practice" by S. Davis et al. offers examples of the process in four local inservice education programs and identifies successful aspects of the needs assessment activities. P. Mann ("Critical Issues and Persistent Problems") discusses the importance of collaborative planning among administrators, community members, and teachers: and reviews the issues of credibility and program justification. In a final chapter ("Benefits of Effective Needs Assessment") M. Walker views mainstreaming from an ecological perspective and suggests that increased local ability to conduct inservice education can have a ripple effect on levels of the exosystem and the macrosystem. Among three appendixes are guidelines for constructing questionnaires, an inservice training checklist for regular educators, and an outline of a group process technique. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED191252

ERIC EXCEPTIONAL CHILD EDUCATION REPORT

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

NEEDS ASSESSMENT FOR INSERVICE EDUCATION: BUILDING LOCAL PROGRAMS

SHARON A. DAVIS
GEORGE D. KUH
PHILIP H. MANN
MARTHA L. WALKER

EC 130194

ERIC

A PRODUCT OF THE ERIC CLEARINGHOUSE ON HANDICAPPED AND GIFTED CHILDREN

NEEDS ASSESSMENT FOR INSERVICE EDUCATION: BUILDING LOCAL PROGRAMS

Training Needs Assessment Task Force

National Inservice Network
Bloomington, Indiana

August 1980

A Product of the ERIC Clearinghouse on Handicapped and Gifted Children
The Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091

A publication of the ERIC Clearinghouse on Handicapped and Gifted Children. Publication Date, 1980.

The Council for Exceptional Children, 1920 Association Drive,
Reston, Virginia 22091

This publication was prepared with funding from the National Institute of Education, US Department of Education under contract no. 400-76-0119. The original work performed herein was done pursuant to a grant from the Office of Special Education and Rehabilitative Services, Division of Personnel Preparation, US Office of Education, Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. Prior to publication the manuscript was submitted to The Council for Exceptional Children for critical review and determination of professional competence. This publication has met such standards. Points of view, however, do not necessarily represent the official view or opinions of either The Council for Exceptional Children, the National Institute of Education, or the Department of Education.

TRAINING NEEDS ASSESSMENT TASK FORCE

Sharon Davis, Chairperson
The Council for Exceptional Children
Reston, Virginia

Ernest Burnell
Longfellow Elementary School
Saginaw, Michigan

Lorraine Keeney
Teachers' Center Exchange
Washington, DC

George D. Kuh
Indiana University
Bloomington, Indiana

Philip H. Mann
University of Miami
Coral Gables, Florida

Martha Walker
Kent State University
Kent, Ohio

ABOUT THE AUTHORS

Sharon A. Davis was project director of the Needs Assessment Project, The Council for Exceptional Children, Reston, Virginia. She is currently a Senior Analyst at General Research Corporation, McLean, Virginia.

George D. Kuh is an associate professor on the faculty of Administration and Administrative Studies in the Graduate School of Education, Indiana University, Bloomington.

Philip H. Mann is a research associate in the School of Continuing Studies at the University of Miami, Coral Gables, Florida.

Martha Lentz Walker is an associate professor of rehabilitation counseling at Kent State University and research associate professor of behavioral science at the Northeast Ohio Universities College of Medicine.

NATIONAL ADVISORY BOARD TO THE NATIONAL INSERVICE NETWORK

Leonard C. Burrello
National Inservice Network
Indiana University
School of Education
Bloomington, Indiana

Alan Abeson
The Council for Exceptional Children
Reston, Virginia

Keith Beery
Institute for Independent Educational Research
San Rafael, California

Whitty Cuninggim
National School Volunteer Program, Inc.
Alexandria, Virginia

Patricia P. Kells
Kansas State Department of Education
Topeka, Kansas

Lawrence W. Marrs
Murray State University
Murray, Kentucky

Lawrence M. Stolurow
University of Iowa
Iowa City, Iowa

John Taylor
University of Illinois
Urbana, Illinois

Elaine Thompson
New York City Board of Education
Brooklyn, New York

Jo White
Reidsville City Board of Education
Reidsville, North Carolina

Katharine Byers
National Inservice Network
Indiana University
Bloomington, Indiana

Office of Special Education and Rehabilitative Services
Division of Personnel Preparation

Jasper Harvey
Director

James E. Stantz
Project Officer

Edward R. Moore
Project Officer

TABLE OF CONTENTS

Page

Chapter 1

Self Diagnosis Regarding Needs Assessment 1

Chapter 2

The State of the Art of Needs Assessment in Education 5
  Overview of Needs Assessment 5
  Current State of the Art in Educational Needs Assessment 8
  Conclusion 13

Chapter 3

Planning and Conducting a Needs Assessment 15
  Steps in the Needs Assessment Process 15
  Strategies for Needs Assessment Data Collection 24
  Using a Survey Sample to Assess Training Needs 31
  Summary 32

Chapter 4

Needs Assessment in Practice 34
  Regular Education Inservice (Mainstreaming) Program 35
  Regular Education Inservice Project 37
  Project SERC (Special Education in the Regular Classroom) 38
  Model Program for Personnel Preparation in Secondary Schools 39
  General Observations Based on Projects' Experiences 40
  Summary of Good Practices in Needs Assessment 41

Chapter 5

Critical Issues and Persistent Problems 43
  Collaborative Planning 43
  Credibility 46
  Program Justification 47
  Conclusions 47

Chapter 6

  Benefits of Effective Needs Assessment 49

Appendix A

Guidelines and Criteria for Constructing Questionnaires 53

Appendix B

Regular Education Inservice Training Checklist 56

Appendix C

Needs Assessment Meeting (A Group Process Technique) 58

NATIONAL INSERVICE NETWORK PROJECTS VISITED BY TASK FORCE

Regular Education Inservice (Mainstreaming) Program
Region XIX Education Service Center, El Paso, Texas
James T. Mancill, Project Director
Jessee H. Treadaway, Project Specialist

Regular Education Inservice Project
Reidsville City Schools, Reidsville, North Carolina
Jo White, Project Director

Project SERC (Special Education in the Regular Classroom)
West Virginia University, Morgantown, West Virginia
Annette Shuck, Project Coordinator

Model Program for Personnel Preparation in Secondary Schools
University of Pittsburgh, Pittsburgh, Pennsylvania
Naomi Zigmond, Director
Theresa E. Laurie, Co-Director

FOREWORD

Planners and providers of inservice education programs are devoting increasing energies and resources to the careful and systematic determination of the needs of target learners. In part, this impetus has derived from Public Law 94-142, the Education for All Handicapped Children Act of 1975. Identification of needs is critical for all learners, whether they be teachers, parents, related service providers, administrators, policy makers, or the community at large. Without question, inservice program design, delivery, and evaluation based on inadequate needs assessment can result in failure.

Recognition of the importance of effective needs assessment techniques and activities, as well as using the obtained results, led the National Advisory Board of the National Inservice Network to create and support a year long Needs Assessment Task Force as one of five specialized Task Force efforts. This monograph represents the work of that Task Force and is intended to be used as a resource by planners and providers of inservice education programs.

The Needs Assessment Task Force drew its membership from personnel presently involved in the study, development, and use of techniques and instruments for planning and delivering inservice education programs based on determining the perceived needs of recipients of these programs. The Task Force also drew on the resources of the National Replicable Inservice Training Needs Assessment Project operated by The Council for Exceptional Children with support from the Division of Personnel Preparation of the Office of Special Education and Rehabilitative Services of the U.S. Department of Education. In addition over 50 project directors from the National Inservice Network participated through providing relevant information. Four of these projects ultimately hosted Task Force member visitations and provided indepth information and perspectives on the place of needs assessment in the planning and design of inservice education programs.

Throughout their work, Task Force members periodically solicited review and comment from the National Advisory Board. The final report was reviewed and accepted by the Board on May 20, 1980, with the recommendation that it be as widely disseminated as possible. The ERIC Clearinghouse on Handicapped and Gifted Children, located at The Council for Exceptional Children, and the office of the National Inservice Network, located at Indiana University, will include this report in their information dissemination collection.

On behalf of the National Advisory Board, we would like to commend the Task Force and participating members of the National Inservice Network for their cooperation and assistance in the production of this important report.

Leonard C. Burrello
Director
National Inservice Network

Alan Abeson
Assistant Executive Director
The Council for Exceptional Children

Chapter 1

SELF DIAGNOSIS REGARDING NEEDS ASSESSMENT

Martha Walker

This Task Force monograph is addressed to the reader who is not easily intimidated. When the terms "needs assessment" and "inservice education" are combined as they are in this document, reader attention is at risk for a variety of reasons. Neither needs assessment nor inservice education enjoy enviable reputations within the education community. Needs assessment has too frequently represented opinions of administrators, and inservice education has suffered from the lack of involvement of teachers. Hallowed principles of adult education underscore the importance of the active learner, yet the history of teachers identifying their professional needs and asserting themselves as planners and providers of inservice education is little short of abysmal.

Public Law 94-142 has been a great awakener for educators and administrators at all levels. The nature of the mainstreaming task so clearly demands new and different skills from teachers that additional training or retraining cannot be discounted. Legislation created a need in a classic and dramatic form. Though the knowledge and skills of needs assessment can be applied to many different problems in the educational system, the Education for All Handicapped Children Act of 1975 riveted attention upon an immediate and emotional target. Perhaps this crisis in the delivery of services to a long overlooked consumer group will generate the energy to overcome negative attitudes toward needs assessment through the specific application of improved methodology. Inservice education, in general, may benefit from the steady involvement of teachers in designing professional activities highly relevant to classroom application of the "mainstreaming concept." This monograph has been prepared with the hope that a positive experience with needs assessment applied to inservice education for educators working with handicapped children will generalize to other areas of training need, removing the stigma attached to both terms.

Members of the Task Force found two commonalities within successful needs assessment projects: (1) the involvement for needs assessment came from local personnel, and (2) the assessment was continuous and flexible. These findings are central to this document, for they strongly suggest the necessary conditions for a positive experience in assessing need. If teachers are more responsive to local sources of influence and the value of the needs assessment is largely viewed as timely tailoring of training to expressed needs, then it is essential that local educators become knowledgeable and skilled at conducting needs assessments.

The goal of this Task Force monograph is to increase the local capacity of educators to conduct needs assessment in order to gather information for effective inservice education programs. Though national, regional, or state descriptions of need are useful to funding sources, curriculum developers, and providers of training, this statement encourages more attention at the local level for improved inservice education. Problems of resource allocation, materials development, and instructional design and delivery are viewed as natural outgrowths of a process that relies upon local interest and experience.

Having identified local investment as the key to successful needs assessment and inservice education, this monograph now becomes quite personal. The fact that you have read on to discover your threshold of intimidation is some indication that you are a possible local resource. "How do I learn?" or "What does it take?" has probably occurred to you. You begin here by assessing your interest or desire to conduct a needs assessment that will result in providing handicapped children with an appropriate education in the least restrictive environment. If you have some estimate of how much energy you are willing to invest now, you can assess your present level of knowledge, understanding, and skills by using the chart that follows, entitled Reader Needs Assessment: Elements of a Comprehensive Needs Assessment.

Competence in any skill area can be described as a series of skills or understandings which allow successful completion of a task. Using the needs assessment chart, consider the components outlined as necessary for completion of a comprehensive needs assessment and identify questions you have that are related to any of these components. The components represent the current structure of knowledge about needs assessment. If you can answer all the questions in the left-hand column, you can assume you are already an expert in needs assessment and should read no further. If, however, you find there are some questions which you are unable to answer to your satisfaction, the reference in the right hand column indicates the section of the monograph that addresses each component. By diagnosing your current level of understanding, you can direct your own utilization of this Task Force monograph.

READER NEEDS ASSESSMENT:
ELEMENTS OF A COMPREHENSIVE NEEDS ASSESSMENT

COMPONENTS/QUESTIONS	REFERENCE
Context	
Definition What is a needs assessment? What is a need? How did the process develop?	Chapter 2
Target Whose needs should be considered?	Chapter 2
Assessor Who should do it? Who wants it done and for what reason?	Chapter 5
Methodology	
Procedures How do I go about it?	Chapters 2-3
Involving Participants How are people interested in assessing need?	Chapter 3
Design/Planning/Evaluating What questions should I consider before beginning?	Chapter 2
Sample How many people should be included?	Chapter 3
Strategies What strategies do I select?	Chapter 3
Application	
Utilization of Results What does the collected data mean? What do I do with the results?	Chapters 2-3
Demonstration Who has been successful?	Chapter 4
Errors to avoid What pitfalls are characteristic?	Chapter 5

Now that you have assessed your need to know and your interest in knowing, you should be able to use this monograph as a resource for conducting a needs assessment to improve inservice education for teachers of handicapped children. Having applied the knowledge and skills described in the monograph successfully, you should be able to continually assess need in this problem area and others. Your school will then have a local expert with specific skills who can, in turn, guide teachers in applying the steps of needs assessment within their classrooms when discrepancies occur between desired behavior and actual behavior.

CHAPTER 2

THE STATE OF THE ART OF NEEDS ASSESSMENT IN EDUCATION

George D. Kuh

It is difficult to estimate accurately the number of dollars that have been expended to improve the human condition. In the past two decades, many billions of dollars have been earmarked for such efforts in the United States alone. During times of growth and prosperity, the allocation of large sums to improve the standard of living or educational level of all persons rarely is challenged. But when financial resources begin to diminish, legislators and others in authority become increasingly reluctant to spend money on programs that appear to be peripheral or ancillary to satisfying basic human needs. The success of Proposition 13 in California and similar movements to reduce public spending are recent illustrations of this phenomenon. When such circumstances exist, the concomitant rhetoric emphasizes the importance of making certain that basic needs are met before consideration is given to programs or services that are designed to improve the quality of life.

"Need" is an often used but generally misunderstood concept. This is true within the education profession as well as society in general. The processes through which need can be identified have not been articulated clearly, yet needs assessment is a tool that educators have used for some time. There is considerable agreement that the concept of "need" requires further clarification and that the procedures used to document whether needs exist must be more fully developed. However, consensus has yet to be reached as to the most appropriate forms of needs assessment processes, and the ways in which needs assessment should be used.

These shortcomings have been accentuated recently by the mandates associated with the passage of Public Law 94-142. The expectation that children with special needs should and could be educated in regular classrooms has further demonstrated the importance of being able to identify accurately the needs of teachers as well as students. If needs can be documented, the likelihood is increased that educational experiences can be provided to meet those needs.

In this chapter, a brief overview of educational needs assessment practices is presented, and the current state of the art of needs assessment is discussed. Finally, a rationale for continued development and use of local needs assessment procedures is suggested.

Overview of Needs Assessment

In general, needs assessment is thought to be an early step in the program planning process (Kaufman, 1972). Prior to the 1960's, it was not uncommon for teachers and administrators to establish curricular goals and objectives based on what was considered sound educational theory and experience. Of course, these educational goals and objectives often were influenced by local politics and legislation. (This continues to be true today in spite of improved needs assessment practices.) In other words, many programs were designed to accomplish the stated objectives without systematic consideration given to the unique needs or learning requirements of students. During the 1960's, a number of efforts were made to place the "horse before the cart" or to specifically determine what student needs existed prior to establishing program objectives and developing program components (Kaufman, Rand, English, Conte, & Hawkins, 1968; Kaufman & Harsh, 1969).

Definitions of Need

As a result of early efforts to systematize the needs assessment process, it became clear that a definition of need was necessary in order to provide direction and meaning to subsequent assessment procedures. Two general definitions were popularized during the late 1960's and early 1970's.

In the first definition, referred to as democratic, "need" was thought to be a change desired by a majority of some reference group. In this approach, a group of experts or representatives from interested constituencies (stakeholders), such as parents, teachers, and students, would determine what "needs" existed. One of the problems associated with this approach is that it is inappropriate, in most instances, to permit some group to ultimately determine needs without first applying some consensually validated criteria. However, the involvement of various constituencies in the needs assessment process is essential for a successful needs assessment (Kuh, Hutson, Orbaugh, & Byers, 1979).

Another problem associated with this and other needs assessment approaches is making certain that the process correctly distinguishes needs from wants. What insures that "need" does not merely reflect changes that are preferred or demanded for various reasons? Some wants, preferences, or demands may accurately reflect need. However, wants do not necessarily represent needs.

The second definition employed in needs assessment efforts, usually referred to as discrepancy, has been used in the majority of needs assessment efforts prior to the mid 1970's. In this approach, need is defined as the discrepancy or difference between an individual's or group's present state of functioning or performance level and the ideal or acceptable level of functioning or performance (Kaufman, 1972). In other words, needs are thought to be shortfalls in educational outcomes or results.

This method of assessing needs became quite popular, due largely to its conceptual simplicity (i.e., need = desired - present level of performance) and the apparent congruence between this method and the goal/objective/outcome mentality that has characterized education during much of the past decade. While the relative clarity of this approach is attractive, the discrepancy model of needs assessment has the potential to distort the validity and, therefore, the usefulness of the results. The term "need" when equated with a gap or discrepancy often connotes negativism or the fact that something is missing. In reality, needs may exist without a gap being apparent.

Another persistent problem associated with the discrepancy definition concerns the degree to which the desired states or levels of performance can be accurately described. In many instances, the desired or ideal state (e.g., teacher's knowledge about handicapped children) is difficult and sometimes impossible to describe. Another important consideration not accounted for by the discrepancy approach is level of necessity, particularly as it is contrasted with luxury, or levels of performance that exceed minimal requirements for satisfactory performance.

Because of the problems associated with past needs assessment definitions, a number of theorists have dealt recently with the issues related to defining need. As a result of their work, several more precise definitions of need have emerged. For example:

> Need is a factor or element without which a person cannot function satisfactorily. (Scriven & Roth, 1978)
>
> Need is something that can be shown to be necessary or useful for the fulfillment of some defensible purpose. (Stufflebeam, 1977)
>
> Need is a necessary or desirable condition, state, or situation -- whether it be an end result that is actuality (met need) or a discrepancy that must be closed between a current or projected actuality and a necessary or highly desirable end result (unmet need) -- as judged by a relevant person or group using multiple objective criteria that have been previously agreed upon. (Lenning, in press)

The more recent definitions consider "need" to be a combination of level of necessity and discrepancy on some dimension(s).

Operational Issues

In addition to increased interest in seeking definitional clarity, the operational issues surrounding needs assessment also have received considerable attention. These attempts have been welcomed by those who have been charged with conducting needs assessments but have had few concrete illustrations as to how to go about the task. To be useful and valid, needs assessment processes should meet at least three criteria: (1) the definition of need used in the process should address both level of necessity and discrepancy; (2) the procedures employed should be detailed enough to permit replication in a variety of different settings; (3) the process should not represent a relatively untested technology (that is, the approach should have successfully passed field tests in several different settings).

An important premise on which rests the very credibility and subsequent utility of a needs assessment is whether needs assessment is perceived as an integral part of the program planning and implementation cycle. Until recently, needs assessment was often treated as an optional early step in the program planning process that, if necessary, could either stand alone as a district or building level intervention or could be avoided if contextual factors so mitigated.

Through experience, however, needs assessors have come to learn that any intervention in the school or community -- whether it be a mail survey, telephone interviews, or collation of unobtrusive measures such as bus driver reports or attendance rates -- has an impact on the building or district. This impact (hopefully positive) can be accentuated if the needs assessment findings are used to influence future activities or change the way in which things are done in the classroom or building.

Experience has shown that needs assessment that follows a predetermined plan (see Kuh et al., 1979) often has a variety of side effects that prove to be beneficial both from an educational as well as a personal development perspective. Furthermore, if a needs assessment is conducted in an open and collaborative manner, the participants in the process -- parents, teachers, students, administrators, etc. -- may adopt a different perspective concerning their building and their respective relationships to the educational process; that is, they learn more about themselves and their respective roles in the school. As a result, various groups and individuals may benefit in very personal ways (e.g., increased self esteem and clarity of purpose) that in turn serve to improve the quality of their contributions to the educational process. Ultimately, the education of all children is enhanced.

Caveat

It would be unrealistic to assume that when the possibility of conducting a needs assessment is introduced, most individuals in the system enthusiastically will support and participate in the project. In fact, in many districts the resistance to becoming involved in a needs assessment will be overt and pervasive. This is not surprising given that in the past many needs assessments served as vehicles through which administrators attempted to validate (through the guise of teacher input) decisions that already had been made by central administrators. In other instances, teachers had participated willingly in needs assessment related activities only to discover that for a variety of reasons the district would be unable to provide programs or services that would attempt to remedy the needs identified in the process. In still other instances, the design of the needs assessment was inadequate, and inappropriate definitions of need were used that ultimately rendered the findings of the project relatively useless. Because of these and other frustrating experiences, needs assessment activities are not always warmly embraced by school personnel. In order to grapple successfully with this set of problems associated with implementing an effective needs assessment, the ambivalent attitudes toward needs assessment must be recognized and dealt with in ways appropriate to a given educational setting.

Current State of the Art in Educational Needs Assessment

As the preceding paragraphs have suggested, needs assessment has evolved from an informal, subjective judgment on the part of a few individuals to a set of systematic procedures integrated in the planning process. Nonetheless, needs assessment is described as an "art" in this section because it is not yet known what works best in identifying various types of needs in different educational settings. At present, the current state of the art in needs assessment can be divided into two parts: (1) those procedures about which we know a reasonable amount; (2) those activities about which a good deal more must be learned if needs assessment is to be an effective educational tool. Fifteen questions that should be answered when planning and conducting a needs assessment serve as a framework in which the current state of the art in needs assessment can be considered. A thorough discussion of each of the following questions or steps is beyond the scope of this presentation. Some of the inherent problems are described more fully by Mann in Chapter 5. Only those activities that continue to be particularly difficult or challenging are treated in any detail below.

1. What is the "problem" or situation out of which needs will emerge?

A variety of methods are available for describing current states of affairs including a modified version of the nominal group process developed for the identification and solution of problems. (See Kuh et al., 1979 for an illustration of the use of the nominal group technique in needs assessment.) In most districts, adequate resources usually exist to insure satisfactory accomplishment of this step.

2. Is there a "need" for a needs assessment?

In many cases, needs assessments are dictated or required by external agencies (federal and private funding agencies, etc.) or by internal politics and policies. It is important to determine by whom a needs assessment is necessary, wanted, or demanded. In some situations, the timing to begin a needs assessment process may be inappropriate. In other situations, the political climate and level of trust in a building or district may require attention before a needs assessment may have any hope of being successful. It also is important to determine whether top administrators are supportive and committed to the process. With the endorsement and participation of central office staff and building administration, the needs assessment process probably will result in a futile exercise. If the motivation for a needs assessment is legitimate, most rational planning groups can and should decide whether conducting a full scale needs assessment is worth the time and effort in light of the potential payoffs and scope of the proposed needs assessment project.

3. Has a needs assessment team been identified?

As previously alluded to, needs assessment is a time consuming set of activities that requires a cadre of committed members representing a variety of stakeholders. However, gaining the commitment of top level decision makers to the needs assessment process is critical to the ultimate success of the project. The successful completion of this latter task will continue to challenge needs assessors.

4. What are the purposes (expected outcomes) of the needs assessment?

Guidelines for determining what the needs assessment could do and what it should do are available from several different sources (see Houston, 1978). For needs assessment to deliver on its promises, more time must be devoted to systematizing this step. Once reasonable parameters have been identified concerning the scope and function of a needs assessment, the needs assessment team can focus its energies more clearly on an achievable set of objectives.

5. Whose needs are to be assessed?

At first blush, this seems to be a fairly straightforward task: select the target groups and find out what they need! Yet, within groups of students or teachers are different types of subgroups that may have needs substantially different from the larger group as a whole. The larger the target group, the more likely one or more subgroups exist with sets of needs different from the larger group. Therefore, several related issues must be addressed at this point. Is it feasible for the needs assessment team to consider equally the various subgroups? Are adequate resources available to support these smaller scale needs assessment projects? This step is cumbersome but critical to obtaining valid information for planning purposes.

6. What types of needs are to be assessed?

Scriven and Roth (1978) and others have drawn attention to the existence and importance of different types of needs. The popularity of the discrepancy approach to needs assessment in education has resulted in a good deal of confusion in this area; therefore, considerable attention must be given to this question during the planning of a needs assessment. It seems reasonable to expect that although needs assessors may have difficulty specifying various types of needs to be assessed at the outset of a project, they can remain sensitive to the possibility that different types of needs may emerge during the project other than those on which they expected to focus.

7. Will a strengths analysis be performed?

This issue is overlooked too often by needs assessors in particular and by school administrators in general. A needs assessment can become an energy draining experience for both the needs assessment team and the school district. The focus of a typical needs assessment is to determine what is "missing." As a result, the process often can turn into a hunt for limitations or weaknesses rather than an effort targeted on the identification of both deficiencies or limitations and local sources of expertise that can be used to alleviate these limitations. During the needs assessment process, it is important for the team to focus some of its energies on processes or persons in the district, building, and classroom that are successful and worth replicating or modeling in some form. By doing so, the needs assessment can identify expertise available in the district to be used at a later time to help meet various needs that are subsequently identified. Using local personnel in this way has many advantages for effective inservice education. Also, calling attention to local successes can serve to buoy the spirits of the needs assessor and all participants in the process.

8. How will the required information be collected?

Many needs assessment teams continue to rely on the district or building survey to document needs. There is no question that surveys can be effective and particularly efficient forms of gathering information from a large number of people. But a survey alone cannot document need. In practice, most needs assessments will probably include some form of survey as one component of the data collection process. Most agree that information such as interviews, open forums, and documentation or use of existing records (see Kuh et al., 1979) are likely to increase the reliability and validity of the process. Multiple measures will improve the chances that the needs identified during the process are indeed legitimate, and should be attended to by program planners.

9. Have the data gathering devices been field tested?

Most needs assessment instruments are "home grown;" that is, they are locally constructed to answer specific questions about the classroom, building, or district. It is imperative to determine whether the data gathering methods will provide the type of information deemed appropriate by the various levels of the needs assessment project. Requesting that a small number of persons complete the instruments prior to mass distribution is a valuable and a necessary step. In most instances, revisions to the data gathering methods and instruments serve to improve the reliability and validity of the process. This step frequently is overlooked even though it is mentioned in almost every substantive discussion concerning needs assessment and research methodology.

10. Has the desired information been collected?

If the eight preceding questions have been adequately answered, this question usually is moot. However, during the needs assessment process, a variety of issues will surface that may call attention to additional points of interest or illuminate different types of needs not previously considered. It must be emphasized that needs assessment should not be viewed as a lock step process. It is not unusual for unexpected findings relevant to the project to surface. These should be considered as potentially useful and could subsequently result in other questions or groups being included in the process. The point is simple but noteworthy: Remain responsive to incoming stimuli generated during the needs assessment, whether it be from the data collection process or from political statements by local stakeholders. These types of information can prove quite valuable later when interpreting and drawing implications from the findings.

11. How will the data from the needs assessment process be analyzed?

In most needs assessments, this question may be the most difficult to answer. Unfortunately, the methodology presently available is inadequate for easy interpretations by local needs assessment teams. Particularly lacking are methods to integrate different types of information. For example, how can information taken from a survey questionnaire be combined with interview or observational data? In many instances, elaborate statistical compilations may not be necessary for the needs assessment team but may be required for continued credibility with superintendents and board of education as well as funding agencies. Usually the integration of statistical treatments of data with rich, descriptive material from students, parents, and teachers will prove most useful in subsequent planning.

12. What are the implications of the needs assessment data?

One aspect of this question refers to how the available resources should be allocated to meet the identified needs of various groups. These are difficult decisions, and the best that can be done with existing technology is to use good judgment mixed with input from the stakeholders when the available resources are distributed to meet needs. Of course, contextual factors such as political and economic climates are variables of great import. Interpretation of the results should be made from several different perspectives as various audiences or constituencies will be affected in different ways by the results and have different roles to play in the planning process.

13. Are the results of the needs assessment communicated in the appropriate forms to various constituencies or stakeholders?

After substantial numbers of weeks and sometimes months embroiled in what may have been a complex and difficult set of activities, the temptation is great for the needs assessment team to produce a thick document with many tables of information and deliver it to anyone and everyone who is interested in reading it. Unfortunately, most persons are not interested in immersing themselves in the entrails of a thick document but rather prefer to learn as quickly as possible the relationship of the findings to their constituent group. This seems a limitation that is relatively easy to remedy, provided the needs assessment team recognizes the importance of summaries written for respective stakeholders.

14. Have the needs assessment data, implications, and recommendations been integrated into the building, district, and classroom planning process?

This is the most critical question, the "bottom line" of needs assessment activities. In order for the findings to influence planning, all of the above questions will have to be raised in an open and collaborative manner and, as emphasized earlier, the commitment to the needs assessment process on the part of decision makers will have to be garnered at the outset of the needs assessment. To date, there is a dearth of case studies that report changes in school programs and policies based on needs assessment findings. Given the recent flurry of interest in needs assessment, more detailed information about the utility of needs assessment data probably will be available soon and, hopefully, will provide insights as to how needs assessment data can be more effectively and efficiently incorporated in the program planning and implementation cycle.

15. Are the target groups being monitored to document the continuing validity of the identified needs?

A comprehensive needs assessment may take many months from start to finish. However, needs change over time in form, degree, and relative importance. Some monitoring is required to make certain the needs identified during the data collection are consistent with those that should be addressed by subsequent planning and programing modifications. It is likely that many needs assessments are judged to be ineffective because needs have changed or increased or diminished between the time the original needs assessment data were gathered and programs were generated to meet these "needs." It is difficult to muster enthusiasm and energy to continue the process beyong what seems to be a traditional terminating point. Nevertheless, this is a critical step and one that is overlooked too often.

These fifteen questions suggest that needs assessment is a very formal, time consuming, and expensive process. This will be true in many cases, particularly in those situations in which the needs of many individuals are to be assessed or when the relative economic and social costs and benefits of the needs assessment are great. However, the principles on which these questions are based can be addressed by the classroom teacher in a much more informal way (see Kuh, Hutson, Orbaugh, & Byers, 1980). This is not to advocate that snap judgemnts or individuals' opinions can take the place of a well thought out effort to assess staff needs. But, after becoming familiar with a formal needs assessment process, it seems likely that many teachers will be able to adopt some variation of the steps involved and apply them to their own setting. For example, two classroom teachers who agree to serve as reality checks on each other can make a relatively informal needs assessment process pay dividends in their respective classrooms.

Conclusion

In general, the relatively recent conceptual and methodological contributions to needs assessment discussed in the preceding sections have not been communicated adequately to educational planners. It is likely that the more complex and comprehensive definitions of need are perceived by various stakeholders (e.g., teachers, building administrators, and parents) as imposing and cumbersome. Most recognize and understand the limitations inherent in earlier assessment efforts but, as with any innovation, the newer approaches have been met with some resistance and suspicion. Yet, the frustration experienced by those who have had some responsibility for conducting needs assessments, as well as by those whose needs have yet to be adequately addressed, underscores the importance for explicating an understandable yet comprehensive approach to the problem of identifying and meeting educational needs. Therefore, the times and circumstances seem to warrant continuing efforts on the part of all educators to improve needs assessment procedures.

The challenges to teachers and administrators are likely to become increasingly more complex during the next decade. Those who have come to appreciate the art of teaching recognize that the dynamics between teacher and learner are integral to the learning process. However, this interaction seems to be too often misinterpreted or ignored in a large scale needs assessment process. This does not have to be and should not be the case.

Needs assessment works best when conducted on a relatively small scale. That is, if the choice is between a district or building level needs assessment, the building based approach is preferable as it will provide more useful results. If the options include a building or classroom level intervention, the latter would be preferable for the same reason. By making teachers and students partially responsible for assessing their own needs as well as the needs of others, the process becomes educative and synergistic. In such instances the human connections between teachers, students, administrators, and parents are not buried in an appendix of a report generated by the central office, but rather are emphasized by those who personally experience and benefit from the interaction.

The art of needs assessment has improved immeasurably during the past several years. As an integral part of the planning cycle, needs assessment has great potential as a tool to improve the education of all children if it is understood and used by classroom teachers, building administrators, parents, and students as well as central office staff. It is hoped that the discussions that follow will bring us closer to the realization of this goal.

References

Houston, W. R. et al. *Assessing school/college/community needs*. Teacher Corps Development Training Activies, 1978.

Kaufman, R. A. *Educational system planning*. Englewood Cliffs NJ: Prentice-Hall, 1972.

Kaufman, R. A., & Harsh, J. R. *Determining educational needs--an overview*. California State Department of Education, Bureau of Elementary and Secondary Education, PLEDGE Conference, October 1969.

Kaufman, R. A., Rand, M. J., English, F., Conte, J. M., & Hawkins, W. *An attempt to put the ten objectives of education developed for Pennsylvania by Educational Testing Service into operational definitions*. Temple City CA: Temple City Unified School District, April 1968.

Kuh, G. D., Hutson, H., Orbaugh, T., & Byers, K. *Designing a problem focused needs assessment*. Bloomington IN: National Inservice Network, 1979.

Kuh, G. D., Hutson, H., Orbaugh, T., & Byers, K. Needs assessment in regular education inservice: A problem-focused approach. *Teacher Education and Special Education*, 1980, *3*, 15-21.

Lenning, O. T. Needs as a basis for academic program planning. In R. B. Heydinger (Ed.), *Academic program planning*. San Francisco: Jossey-Bass, in press.

Scriven, M., & Roth, J. Needs assessment: Concept and practice. In S. Anderson & C. Coles (Eds.), *Exploring purposes and dimensions*. San Francisco: Jossey-Bass, 1978.

Stufflebeam, D. L. *Needs assessment in evaluation*. Paper presented at the meeting of the American Educational Research Association, Evaluation Conference, San Francisco, September 1977.

Chapter 3

PLANNING AND CONDUCTING A NEEDS ASSESSMENT

Sharon Davis

Needs assessment should be designed to be an integral component of the cycle of planning, implementing, and evaluating inservice education programs. When it is planned and conducted in this manner, it becomes an ongoing function of the program. Needs assessment has been operationalized by several approaches, and while these approaches may vary, there is considerable agreement about the steps that are included in the process. Presented in this chapter are a general overview of the needs assessment process and a description of the activities that are included at each step of the process. This is followed by a description of a variety of strategies for needs assessment data collection and some considerations for selection associated with many of the strategies. The use of survey sampling in collecting needs assessment data is addressed in the final section.

Steps in the Needs Assessment Process

A successful needs assessment requires the completion of seven major steps:

1. State concerns.
2. Identify people and roles.
3. Plan the needs assessment data collection.
4. Implement the needs assessment data collection.
5. Disseminate results and set priorities.
6. Design the inservice program.
7. Continue to assess needs.

A CHECKLIST OF ACTIVITIES FOR STEPS IN THE NEEDS ASSESSMENT PROCESS

1. State Concerns.

_____Identify concerns (problems that indicate a need for inservice training).
_____Identify target population (individual or group).

2. Identify People and Roles.

_____Determine who will manage the needs assessment.
_____Determine needs assessment planning team.
_____Identify those who will conduct the assessment.

3. Plan the Needs Assessment Data Collection.

_____Determine needs assessment goals.
_____Determine needs assessment data collection strategies.
_____Determine and obtain resources required for needs assessment.
_____Develop data collection plan and time-line.

4. Implement the Needs Assessment Data Collection.

_____Develop instrumentation and recording procedures.
_____Field test and validate instruments and procedures.
_____Collect needs assessment data.
_____Tabulate data collected and summarize results.
_____Analyze results and report to planning team.

5. Disseminate Results and Set Priorities.

_____Disseminate results of needs assessment to respondents and interested constituencies.
_____Prioritize needs for training.
_____Determine feasibility of meeting the needs and select prioritized needs for training.

6. Design the Inservice Program.

_____Identify the target audience.
_____Identify needs to be satisfied.
_____Describe training or activity to be offered to satisfy the need.
_____Identify who will be responsible for each activity.
_____Identify resources needed to accomplish the task, including incentives to be offered to training participants.
_____Identify how progress and accomplishments will be assessed.

7. Continue to Assess Needs.

_____Determine strategies for continuous assessment during conduct of training program.
_____Reassess needs when program has been completed.
_____Evaluate progress and accomplishments.

The activities required in order to complete each of these steps are presented in the checklist on page 16. This checklist can serve as a guide for planning and conducting a needs assessment. Each of the steps in the process is discussed more fully in the following sections.

Stating Concerns

A needs assessment usually arises out of the expression of general concerns about a situation which is causing a problem for particular individuals. For example, in one school system visited by the Task Force team, teachers had come to the administration and requested inservice education to help them work with handicapped children in the regular classroom. In other sites, a university or regional service center recognized that the federal and state laws providing for the education of handicapped children created needs for inservice education of regular and/or special educators to appropriately educate handicapped children.

This recognition of concerns about a problem situation which inservice should be able to alleviate is the first step in the needs assessment process. Once the problem for a particular target population has been defined and the feasibility of providing inservice to address the problem has been determined, the people who will be involved in the needs assessment should be identified and their roles defined.

Identifying People and Roles

Essential personnel for the needs assessment include a person to manage the needs assessment process, members of a team to plan the needs assessment, and the person(s) who will conduct the assessment. Typically, the project or inservice program director will be responsible for ensuring that the needs assessment is planned, conducted, and evaluated as an ongoing function of the inservice program.

Most experts in needs assessment suggest that a planning or advisory team be formed to assist with the assessment. Members of the team should include representatives of the target groups whose needs will be assessed. The team approach allows the participation of these groups prior to the gathering of specific data and serves to create an accepting atmosphere for needs assessment. The school administration should be represented on the planning team to assist in gaining the necessary support to implement the needs assessment. The role of the planning team is to clarify the general concerns and determine needs assessment goals, to assist with planning the needs assessment, to determine who will conduct the assessment, to review results and set priorities for training, to advise on design of the training program, and to ensure that needs assessment is an integral part of the program.

The person who will actually conduct the assessment (the needs assessor) should be identified and included as a member of the planning team. This person may be someone from the local school system assigned to do the assessment (internal) or someone from outside the system contracted to do the work (external). Often the project or inservice program conducts the assessment. (For a discussion on criteria for selecting the needs assessor, including advantages and disadvantages of an internal versus external assessor, see Mann, Chapter 5, and Kuh, Hutson, Orbaugh, & Byers, 1979.) The role of the assessor must be defined by the planning team. The assessor will be instrumental in determining needs assessment strategies, developing and testing instrumentation and procedures, collecting and tabulating the data, and summarizing the results.

Planning the Needs Assessment Data Collection

There are several activities included in the planning process. The planning team must first determine the needs assessment goals based on the specific concerns that have been identified. The following example illustrates two areas of concern and related needs assessment goals for assessing training needs of regular educators:

Area of concern: The need to be able to differentiate between the various handicapping conditions according to instructional needs.

Needs assessment goal: To assess regular educators' knowledge of different handicaps.

Area of concern: The need to assist in individualized education programs (IEPs) for handicapped learners.

Needs assessment goal: To assess regular educators' knowledge about IEPs and ability to plan and implement an IEP for a handicapped learner in a regular classroom.

The identification of specific concerns and needs assessment goals provides the focus for identifying what data must be collected to be able to accurately determine needs for inservice education.

The next step in planning the needs assessment is to select the strategies for data collection. These are generally referred to as the needs assessment strategies or techniques. Over 50 data collection methods have been described in the literature, many of which are practical, valid, reliable, and cost effective for particular purposes (Lenning, in press). Good practice in needs assessment dictates that using more than one method of data collection may provide a more accurate assessment of training needs. A number of workable strategies for assessing training needs are described in the second part of this chapter. The needs assessment strategy or strategies selected must be based on the particular concerns of each individual situation and be realistic in terms of resources available. The following questions serve as a guide in choosing the appropriate needs assessment techniques:

1. What are the special characteristics of the strategy under consideration?

2. How many people with what skills are needed to implement this needs assessment technique? (Are persons with the appropriate skills available?)

3. What type of instrumentation must be purchased, adapted, or developed?

4. What type of record keeping and data analysis is required? (Are the data manageable?)

5. What will it cost?

When the needs assessment strategies have been selected, resources for conducting the needs assessment must be identified and obtained. This includes obtaining skilled personnel, financial resources, and released time, if needed. A data collection plan should be developed which specifies the target audience, the sampling procedure, and a time-line for the implementation of the assessment.

Implementing the Needs Assessment Data Collection

The activities in this step of the process include developing instrumentation and recording procedures, field testing and validating instruments and procedures, collecting the data, tabulating the data and summarizing results, and analyzing results and reporting to the planning team.

Some needs assessment techniques require the development, adaptation, or selection of appropriate instrumentation. Interviews require the use of a written schedule of questions to be used by the interviewer to guide questioning and ensure consistency of questioning. Administering a questionnaire, checklist, or test requires a printed instrument. For documentation and observation, a standard recording form must be used to analyze the content of existing records or standardize what is recorded through observation. In order to use the card sort procedure, the statements must be selected and validated.

Most of the instrumentation must be developed by the needs assessor to fit the local situation. Occasionally a published instrument or one developed for use in another site may be suitable. Sometimes, an existing instrument may be adapted or modified to fit the needs of other projects. Several generic instruments have been developed for assessing training needs, and these may be useful for certain situations. (See Mann, 1979, for one example.) Any instrument that is developed by the local needs assessor should be field tested prior to using it for the data collection. Depending on resources and time available, the piloting of the instrument may consist of extensive field testing and revising, or it may mean using the instrument with a few people to determine what questions are unclear and whether or not the responses will provide useful data. Planning how the data will be aggregated and analyzed should be part of the field test process.

Once the instruments and procedures have been selected (and/or developed) and tested, the next step is to collect the data. This is followed by the tabulation and analysis of the data. A report on the results should be prepared for the planning team which identifies the specific needs, the strength of each need, and the number of people in need.

Disseminating Results and Setting Priorities

The results of the needs assessment, after review by the planning team should be disseminated to the participants in the assessment. This will contribute to the development of a climate of trust and a greater commitment toward future needs assessments and subsequently planned inservice education. At the appropriate time, other interested audiences (parents, board of education, etc.) should be informed about the needs assessment.

The planning team should examine the results in terms of the concerns previously identified. If several different data collection strategies have been used, a way must be found to aggregate and use the data to set priorities for training.

Setting priorities means weighing several sources of information. The data from the needs assessment(s) are just one source. It is also necessary to consider policy provisions, such as federal and state laws, state education agency policy, and local board policy. For example, the mandate of Public Law 94-142 for an individualized education program for each handicapped child imposed a need for training which could not be ignored when the law first went into effect. New programs and changes in organizational arrangements may also affect the setting of training priorities. Past program evaluations are valuable in identifying training priorities, for they may reveal public concerns and program weaknesses. A priority rating form, such as the one on page 21, can be useful in assessing the importance of each identified training need. The questions posed can be used by the planning team as a guide in setting priorities. Key points to consider when prioritizing needs are that more than one source of information should be used and that decisions should be made by a group of people who will carefully review the information.

An important part of selecting needs for which an inservice program or activity will be developed is to examine the feasibility of meeting each prioritized need. Questions assessing feasibility are also included on the priority rating form. Existing and potential resources for training (financial and skilled staff) and possible constraints should be considered. Careful review may require realistic reordering of priorities for the development of the inservice program. For example, training to meet a low priority need might be offered first because probability of initial success would be likely to gain support for the rest of the program.

Resource requirements for satisfying priorities selected should be estimated. These include staffing requirement; materials, equipment, and physical facilities required and available; cost analysis; appraisal of time required for implementation; and potential for documentation. A careful analysis of existing and alternative funding sources should be conducted. Programs currently being offered should be examined to determine if they can contribute to meeting a priority need.

PRIORITY RATING FORM

Training Need ____

Questions to consider for setting priorities for training needs: (Circle number of response.)

Rating of Need

Extent of Need			
How extensive is this training need?	Not extensive	Very extensive	1 2 3 4 5
Impact of Need			
How serious will be the effect on educators if this need is not met?	Not serious	Very serious	1 2 3 4 5
Future Needs			
To what degree will this need significantly increase in the future?	No increase	Great increase	1 2 3 4 5
State of Satisfaction			
How adequately has inservice training been developed to meet this need?	Very adequate	Not at all adequate	1 2 3 4 5
Effectiveness of Current Training	Very effective	Ineffective	1 2 3 4 5
Relevance of Need			
Will satisfaction of this need have a high or low relationship to the achievement of the goal to provide an appropriate education to each handicapped child?	Low	High	1 2 3 4 5
What is Your Overall Rating of This Need for Inservice Education?	No need	Great need	1 2 3 4 5

Rating of Feasibility of Meeting Need

Staff Requirement	Low skill	High skill	1 2 3 4 5
Finance			
How costly is it to develop a program to meet this need?	Inexpensive	Very expensive	1 2 3 4 5
How long will it take to meet this need?	Little time	Long time	1 2 3 4 5
What is Your Overall Rating of the Feasibility of Meeting This Need?	Not feasible	Very feasible	1 2 3 4 5

Planning the Inservice Program

After priorities have been established for the target population, the training program for meeting the needs can be designed. Each need should be considered and stated in writing in terms of the following elements:

1. Identification of the need to be satisfied.

2. A description of the training or activity to be offered to satisfy the need (a chronological listing of activities).

3. Identification of who will be responsible for each activity (staff assignment).

4. Identification of resources that are essential to accomplishing the task, including incentives.

5. Identification of the necessary documentation to enable an assessment of activity progress, accomplishment, or products.

A suggested form for planning the inservice program is illustrated on page 23. This scheme for planning can be used on an individual basis, in which case the needs to be met might be very narrow and specific to the individual. The same planning scheme can be adapted by a state education agency for a statewide plan for inservice education. The important consideration in planning an inservice program is that it should be based on the needs that have been identified. Too often, inservice education program proposals report needs assessment data, but fail to present a training design that reflects identified needs.

Continuous Reassessment of Needs

Needs assessment should be continuous. As training is conducted and information is collected, needs and priorities change. Most of the inservice programs visited by the Task Force used several techniques to continually reassess training needs. Questionnaires, interviews, informal listening to trainees, and classroom observation after each training session were among the techniques employed. The ability to assess needs tends to improve continually throughout the course of the training as the participants begin to see the relationship between their expressed needs and the inservice program.

INSERVICE EDUCATION PLAN FOR ____________________

(Individual, Target Population)

Need to be satisfied	Description of training or activity to be offered	Who will be responsible for training or activity	Resources needed	Documentation to enable an assessment of progress, accomplishments

Reassessing needs on an annual basis is strongly supported as a good practice. Comparisons can be made between the current year's and previous year's results as a rough indication of the extent to which particular needs have been satisfied during that period. The reassessment of needs when the inservice program has been completed will provide information that can be used to evaluate the progress and accomplishments of the program.

Strategies for Needs Assessment Data Collection

A number of strategies can be used to collect data about inservice training needs. Because many people seem to equate needs assessment with the administration of a questionnaire, this section is presented to assist the reader in exploring other needs assessment data collection methods. Many of the methods are explained in sufficient detail to enable the reader to implement them; others that are more complex require the reader to turn to additional sources to become knowledgeable about their implementation. Included in the presentation of each of the following approaches is a discussion of some of the pertinent characteristics that should be considered prior to selecting that particular data collection technique.

Interviews

Interviews are structured or unstructured conversations between an interviewer and a respondent designed to obtain information about training needs. Interviewing requires relatively skilled data collectors in order to maintain uniformity of behavior from interview to interview or from interviewer to interviewer. The length of time required for an interview also reduces the number of people who can realistically be polled. Interviews may be very useful in gathering information that will be perceived as more creditable than that gathered through a written questionnaire, for people are often more comfortable talking than writing, and interview responses can be checked for clarity. Interview methods are described as follows:

Structered interview. The structured interview is rigid in its design and implementation. It is used to obtain specific information and deals with a predefined area of interest. Questions have been predetermined and systematically organized; the analysis of the data has been designed prior to initiating the study. Of the several forms of structured interviews, the most common uses an interview schedule which is a printed questionnaire. This schedule is used by the interviewer during the entire course of each interview, and in every case, both the wording and the sequence of the questions are identical.

Unstructured interview. The unstructured interview is designed to obtain information in a flexible and subjective manner. It is flexible in its design and implementation. The interviewer may or may not have a set of questions to ask; he or she can use personal judgment to order or sequence questions during the actual interview session. The ordering of the questions asked often depends on the respondent's answers. No attempt is made to secure identical information from every individual. The unstructured interview is most often used during the early phases of planning a needs assessment study when the purpose is to gain insight into general concerns. This preliminary phase will identify specific information to be used later in a questionnaire or structured interview.

Telephone survey. The telephone survey is another method for conducting an interview. It involves the development of an interview schedule and selection of representative numbers to be called by the interviewer. Grapevining is a telephone interview technique in which those selected for initial interviews are asked to name others who are knowledgeable about needs and who ought to be called for information.

Questionnaire

The questionnaire, a written form used in gathering information on a subject, is a well accepted method to determine training needs. The questions are brief, specific, and phrased to a short answer. Each is designed to elicit information which can be used to determine training needs, delimit the scope of the training, identify course content, etc. (Johnson, 1967).

The questionnaire can probe information, opinions, or attitudes, Because it is a paper-pencil technique, instructions are usually contained on the questionnaire form and little guidance or encouragement is given for expanding the boundaries of the instrument. It can be administered individually or in large groups, through the mail or in person.

Before using a questionnaire, the needs assessor should recognize that while relatively large numbers of people can be polled, returns cannot be guaranteed. Questionnaires may be costly in time and money to compose, send out, collect, tabulate, and analyze. Also, written responses on a questionnaire may be misinterpreted in the data analysis, or semantic problems with the questionnaire may go undetected and not elicit valid responses. Although computerized questionnaires make it possible to handle large amounts of data speedily, many people tend to react negatively to requests to fill out formal survey instruments. Because many people feel that questionnaires will not reveal their "real" needs, they do not fill them out conscientiously. Therefore, results of questionnaires are often discredited. The needs assessor who decides to use a questionnaire should explore some of the techniques that may enhance the credibility of questionnaires, such as personal administration and developing questions designed to assist people in expressing themselves (Keeney, 1979).

Developing a questionnaire which will provide valid and reliable data requires knowledge that cannot be conveyed in this document. There are many sources of information available that will assist in questionnaire design. Covert's (1977) paper, Guidelines and Criteria for Constructing Questionnaires, prepared for the Evaluation Training Consortium is particularly helpful. (A copy of the author's important points for constructing a questionnaire is included in Appendix A.)

Checklist

A checklist contains a list of detailed needs or items indirectly related to needs. A job, process, program, activity, or area of responsibility may be broken down into a list of detailed parts and arranged in logical sequence on the checklist. Respondents are asked to check off the items about which they feel they would like to have more skill or knowledge. Tabulating responses from all the checklists will reveal training needs of the group. Checklists can also be used on an individualized basis for assisting in the design of an individual's training plan. A checklist does not reveal the strength of an individual's need for training in the items checked.

Content Analysis of Existing Records (Documentary Analysis)

Content analysis is defined as a methodology by which a person seeks to gather data from written documents by means of a systematic, objective, and quantitative procedure. Such records as student folders, personnel files, program reviews, and other data contained in most school system and state education agency files can be a resource for identifying training needs. Covert (1977) lists six steps for developing and administering content analysis:

1. Identify the universe of content (that content which is to be analyzed).
2. Obtain examples of the content to be analyzed.
3. Identify the coding units (how the content will be divided).
4. Specify a category system (choose a classification system into which content will be fitted).
5. Apply the selected category system to the individual coding units.
6. Revise category system to the individual coding units.

In order to use content analysis to identify inservice training needs, appropriate records must be easily and legally accessible. The quality of the data is dependent on the quality of the records, and the kind of data is limited by what is available in the records. This technique is useful when direct access to the target population is restricted. However, it may be a very time consuming process unless the desired data is available through the computer.

Observation

Observation has been defined as ". . . purposive and selective watching, counting, listening to, or even smelling of objects of phenomena as they take place" (Richardson, Dohrenwend, & Klein, 1965, p. 9). Observation is often used when documents are nonexistent and/or when questioning the subject will not provide the researcher with the type of information needed. For instance, a school supervisor may observe a regular education teacher to determine if the teacher is able to deal effectively with the handicapped students in the classroom. More valid data may be acquired through observation than if the persons being observed are asked to report their needs.

Observation requires trained observers, since accuracy is difficult to maintain. It is also time consuming, and only relatively small populations can be observed. Kuh et al. (1979) outlined the major steps in the observation process:

1. Determine format for observation.

2. Identify site or observational situation.

3. Gain permission to observe.

4. Record observations using one or more of the following:

    a. Recording on predetermined schedule or checklist.

    b. Notetaking in narrative form.

    c. Tape recording observations as they occur.

Group Process Techniques

Several group process techniques are useful in identifying training needs. They all allow participants to talk to each other when identifying inservice needs, to clarify the needs identified, and to get immediate feedback.

Brainstorming. Brainstorming is the unrestrained offering of ideas or suggestions about training needs by all members of a group. The group is convened and a question posed related to the training problem they will be brainstorming. If the question is not posed in advance, participants should be given a few minutes to think about it before beginning the session. Individuals in the group are then asked to call out any ideas they have for answering the question. These are written down on a chalkboard or flip chart as fast as they are called out. Rules for brainstorming include the following:

1. No criticism is allowed.

2. Unrestricted thinking is encouraged.

3. As many ideas as possible are sought.

After the predetermined time is up, the list of ideas is examined to determine how many of the items are training needs. Brainstorming may generate a wide range of ideas, for it should provide an atmosphere that encourages individuals to feel free to make suggestions.

Buzzing. Buzzing is a group technique which can be used to identify training needs. It consists of dividing the audience into small groups of four or five persons. Each group chooses one of its members as chairman and another as recorder. At a signal each group begins to discuss the question at hand. The chairman keeps things moving, while the recorder writes down all the ideas thrown out. At the end of the work period (10 to 20 minutes) the groups reassemble, and the chairperson of each group reports what the group has produced, using the recorder's list. Each item is written on a chalkboard or flip chart. Duplicated items are indicated by adding a mark after the original statement. When all groups have reported, final ideas are added from the floor. Later the list is classified for further use (Johnson, 1967). Buzzing is a useful technique to encourage individual participation in the group process and to prevent a vocal minority from controlling a meeting. It requires that the group leader be efficient and diplomatic in organizing and guiding a large group.

Nominal group technique. The nominal group technique (Van de Ven & Delbecq, 1971) is a group process model developed for problem identification and planning which has also been used as a needs assessment technique. It allows the group to identify, rank, and prioritize needs statements. The procedure consists of the following steps:

1. The training needs question is posed.

2. Working alone, each group member writes down training needs related to the question.

3. The needs generated silently are written on a chart or board, asking each participant to respond in turn. The round-robin listing continues until there are no further ideas.

4. Each of the needs statements on the list is dicusssed and clarified.

5. Group members independently select and rank a specific number of priority items by writing each on a 3 x 5 card. Results are tallied for the group.

6. The group discusses and clarifies the ranking obtained in the preliminary vote.

7. A final vote is taken and results aggregated to develop a prioritized list of training needs.

The nominal group technique provides adequate time for thinking, exploring, and/or clarifying ideas. This may result in more useful information than other group process techniques. It also provides a method for aggregating individual ideas in a balanced manner and developing a prioritized list of training needs that reflect the group's judgments.

Delphi Technique

The Delphi technique is a process for gathering opinions about training needs from a number of people who are not assembled at the same time. The process also involves ranking the needs and reaching some degree of consensus about their importance. Participants are allowed to remain anonymous, if desired, and to participate at their convenience within general time parameters. The Delphi consists of the following steps (Houston et al., 1978):

1. A panel is selected that may be composed of experts in a field, parents, students, or selected officials.

2. A questionnaire is mailed or distributed to panel members asking them to list their opinions or judgments concerning the subject being considered. (In a needs assessment, they may be asked to identify major goals or serious problems for a school.)

3. Recommendations from the panel are refined and listed on a second questionnaire. This questionnaire then asks panel members to rate each item in terms of its importance, need, or chance of success.

4. Items received as responses on the second questionnaire are analyzed and reported in terms of means or interquartile ranges. This summary of the group response as well as the comparison of each panel member's responses to the majority of the group is returned with the third questionnaire. Members are asked to revise their ratings or to give the reason they do not wish to do so and thus remain in the minority.

5. This third questionnaire is analyzed upon its return. Again, majority ratings are determined for the responses. These majority ratings, as well as minority opinion, are mailed or distributed to the members, and they are given a final opportunity to revise their ratings.

The Delphi technique permits focused interaction among people who are dispersed. It provides panel members with information on the responses of others and allows them time to consider their judgments and to make independent decisions. While it is a relatively inexpensive technique, it does require considerable time to complete the process. Return rates also tend to decrease with each round of questionnaires. Other problems associated with the Delphi are lack of stimulation through face-to-face discussions, and misinterpretation by panel members of the meaning of statements with no process for clarification.

Testing

Testing is a well established method of determining training needs. Tests can measure skill, knowledge, and attitudes. Tests can require a performance response (demonstrating a particular teaching technique) or a written or oral response. Results indicate gaps, if any, in the testee's skill or knowledge, thus suggesting training needs. If a standardized test is used, the data obtained are statistically valid and reliable, enabling comparisons over time or from group to group. However, the use of the test is limited by the content of behaviors or knowledge covered by the test.

Hearings

Hearings represent a method of assessing needs that is useful for gaining information from interested persons outside the school system, such as parents of handicapped children. Notification is usually published in the local newspaper, stating the purpose of the meeting and inviting those interested to attend. Attendees are given an opportunity to express themselves at the meeting, and staff summarize the results for use in the later ranking of inservice training needs.

Task Force or Committee

A task force is a small group of selected personnel, usually two or three, who are assigned a problem to solve. In analyzing the problem, the task force may unearth training needs that must be met before their recommended solution to the problem can be implemented. Their final report should identify these training needs.

An advisory committee can also identify training needs with considerable accuracy. The people who have a direct interest in the inservice training and who represent various constituencies should be selected for the committee. The members of the committee assist the training director to analyze the needs of the potential trainees. While this should be one of the roles of the planning team formed to advise the needs assessment process, another committee may be established solely to identify training needs.

Workshops

The workshop is a technique which brings a group together to develop furthur skill through actual practice in a teaching function, such as lesson planing or developing IEPs. As the group pursues its workshop goal, there may emerge evidence of individual and group needs for further training. These may be noted through observation by the trainer, or the workshop evaluation may provide an opportunity for the trainees to identify needs for further training.

Slip Writing

Slip writing is a technique that is useful at the conclusion of a training session. Each trainee is given a number of 3 x 5 cards and asked to respond to a question, such as "I feel I need the following additional skill or knowledge about this subject," or "I would like the following related training," etc. At a signal, each person starts writing out responses, one response to a slip. A time limit is set, usually 5 minutes, and the slips are collected. The trainer later classifies the slips and analyzes the needs for further training. This technique is also a check against the validity of the instruction already given (Johnson, 1967).

Card Sort

The card sort is a forced choice procedure for selecting training needs. Potential training needs are identified and typed on a batch of 3 x 5 cards (usually no more than 10). These cards are given to the person whose ideas are sought. The person arranges them in order of perceived personal need and omits any that do not reflect his or her needs. If it is desirable to get leads from several people at a time, each is given an identical pack. This technique may be particularly useful for prioritizing already identified needs.

Studying Students

Studying students is another way to identify the training needs of teachers. If students have needs that are not being met, this may be a reflection of their teachers' needs for training. There are numerous ways to determine the specific needs of students (Edelfelt et al., 1972; Hershkowitz, 1974). The methods chosen should be designed to focus on the concern that has been identified.

Summary

Included in this chapter is a discussion of the major steps in the needs assessment process, a description of a variety of strategies that can be used to collect data about inservice training needs, and a brief overview of the use of sampling. The steps and activities included in the checklist on page 16 serve as a guide for managing the assessment. Often, the step labeled "Design the Inservice Program" is not considered part of the needs assessment process. It is included here, however, to highlight the importance of relating identified needs to the inservice design. Because good practice in needs assessment requires using more than one strategy to collect data about training needs, a number of strategies are described in sufficient detail for the reader to be able to implement them.

The next chapter in this monograph offers examples of needs assessment in action. Needs assessment activities of four local inservice education programs are described and good practices of these programs are summarized to assist the reader in implementing a successful needs assessment.

References

Covert, R. Content analysis: Analysis of work samples and other written documents. Charlottesville: University of Virginia, Evaluation Training Consortium, 1977. (Unpublished paper.)

Covert R. Guidelines and criteria for constructing questionnaires. Charlottesville: University of Virginia, Evaluation Training Consortium, 1977. (Unpublished paper.)

Edelfelt, R., et al. Teacher designed reform in teacher education. Final Report, Project No. 1-0683. Washington DC: National Center for Educational Research and Development, Office of Education, US Department of Health, Education, and Welfare, August 1972.

Hershkowitz, M. (Ed.). Statewide educational needs assessment. Silver Spring MD: Hershkowitz Associates, 1974.

Houston, W., et al. Assessing school/college/community needs. Omaha NB: The Center for Urban Education, 1978.

Johnson, R. Determining training needs. In R. Craig & R. Bittel (Eds.), Training and development handbook. New York: McGraw-Hill, 1967.

Keeney, L. Finding out what teachers need. In K. Devaney (Ed.), Building a teachers' center. Teachers' Centers Exchange, 1979.

Kuh, G., Hutson, H., Orbaugh, T., & Byers, K. Designing a problem-focused needs assessment. Bloomington IN: National Inservice Network, 1979.

Lenning, O. Assessing current student needs and demands for program restructuring. In P. Jedamus & M. Peterson (Eds.), Handbook of institutional planning and institutional research. San Francisco: Jossey-Bass, in press.

Mann, P. Mann self-assessment competency inventory (generic and specialized). Miami: University of Miami, 1979.

McCarthy, P. Sampling: Elementary principles. Ithaca: New York State School of Industrial and Labor Relations, Cornell University, 1970. (Bulletin No. 15.)

Richardson, S., Dohrenwend, B., & Klein, D. Interviewing. New York: Basic Books, 1965.

Van de Ven, A., & Delbecq, A. Nominal versus interacting groups for committee decision-making effectiveness. Academy of Management Journal, 1971, 14, (3).

Chapter 4

NEEDS ASSESSMENT IN PRACTICE

Sharon Davis, Jessee H. Treadaway, Jo White, Annette Shuck, Theresa E. Laurie

Four inservice training programs conducted in local school systems in the United States were site visited by the Training Needs Assessment Task Force to gain information about good needs assessment practices. The sites were selected from National Inservice Network projects known to be using a variety of needs assessment strategies to gather data for planning and designing their inservice programs. Interviews were held with project directors, project staff, principals, and teachers to gain different perspectives on needs assessment practices and the impact of needs assessment on the program's success. Selected programs included the following:

Regular Education Inservice (Mainstreaming) Program
Region XIX Education Service Center
P.O. Box 10716
El Paso, TX 79997
James T. Mancill, Project Director
Jessee H. Treadaway, Project Specialist
Caryl Eisenman, Demonstration Teacher

Regular Education Inservice Project
Reidsville City Schools
920 Johnson St.
Reidsville, NC 27320
Jo White, Project Director

Project SERC (Special Education in the Regular Classroom)
Department of Special Education
806-D Allen Hall
West Virginia University
Morgantown, WV 26506
Annette Shuck, Project Coordinator

Model Program for Personnel Preparation in Secondary Schools
University of Pittsburgh
727 Learning Resource Development Center
393 O'Hara St.
Pittsburgh, PA 15260
Naomi Zigmond, Director
Theresa E. Laurie, Co-Director
Lorie Buchwach, Coordinator
Jan Sansone, Coordinator
Pat Franklin, Resource Teacher
Susan Wetzel, Resource Teacher

The needs assessment process used by each of these projects and specific needs assessment data collection techniques are described in this chapter. The Regular Education Inservice (Mainstreaming) Program illustrates the complete needs assessment process in practice. It is a good example of how needs assessment can be a continuous process during the conduct of the inservice program. The Regular Education Inservice Project illustrates several steps in the needs assessment process and shows how an existing needs assessment instrument was adapted to meet local needs. Project SERC (Special Education in the Regular Classroom) presents a number of techniques for assessing and reassessing inservice training needs, including the Q sort, nominal group technique, and observation. The Model Program for Personnel Preparation in Secondary Schools shows how a project experimented with a variety of needs assessment techniques in order to continually revise and improve needs assessment procedures. A group process technique developed by this program is described.

Regular Education Inservice (Mainstreaming) Program, El Paso, TX

The Region XIX Education Service Center provides technical assistance to all of the schools it serves to help them meet the needs of all students. Needs assessment is an ongoing part of all Center projects. The concerns which led to the development of the Regular Education Inservice (Mainstreaming) Program were related to meeting the mandates of Public Law 94-142 and Texas laws regarding education of handicapped children in the least restrictive environment. Based upon these mandates, Education Service Center staff identified six broad areas of concern:

- The need to understand the requirements relating to education of handicapped children and develop a positive attitude toward their task.
- The need to be able to differentiate among the various handicapping conditions according to instructional needs.
- The need to become conversant in formal testing and to demonstrate expertise in informal assessment techniques applicable to handicapped conditions.
- The need to assist in individualized education programs for handicapped learners.
- The need for the teacher to be an effective team member in planning the instructional program for the handicapped learner in the regular classroom.
- The need to evaluate the progress of the child in the IEP and assist in updating the necessary goals.

These needs led to the development of a program to retrain teachers in individualized strategies to meet the special needs of the handicapped learner in the regular classroom. The project is designed to train five people (four teachers and the principal) from each of ten school campuses each year for a 3 year period. These people, when trained, are expected to provide assistance to their colleagues and to conduct a building level workshop before the project year ends.

To plan and conduct the needs assessment, a project staff of three people were employed. A project advisory council with a representative from each school district was formed to assist in planning and programmatic decisions. The advisory council was an important means of gaining support for the needs assessment and inservice program.

Project staff designed several ways to identify the needs of the 50 people selected to receive training each year. Using the six major needs identified in the project proposal, a Regular Education Inservice Training Checklist was devised (see Appendix B). Participants were asked to rate their competency in performing a number of specific tasks that fell within the six categories. Training participants were also asked to respond to a second questionnaire, the Regular Education Concern Based Adoption Model (CBAM), acquired from Hall & Rutherford (1979). This instrument, designed to assess concerns about an innovation, asked respondents to answer in terms of their present concerns about their role in providing education to handicapped children in their regular classrooms. While these sources of training needs were available immediately, project staff continued to assess needs throughout the year. As each workshop was conducted, its evaluation included two questions about additional training needs related to the workshop topics or other topics. In addition, as technical assistance was provided to teachers individually in their classrooms, a written record was kept of these visits and served to identify concerns about working with handicapped children and needs for training.

The results of the first questionnaires were tabulated informally to gain immediate information for program design. The responses to the CBAM were computerized. Trainees were informed of their scores on both questionnaires, and a graph of their CBAM scores was prepared for them to view. In deciding what needs were priorities, project staff and the advisory council considered the mandates of the laws, the needs of school programs, and individual teacher needs.

Six workshops were planned around the major needs expressed as the original concerns. Results of the needs assessments were used in developing specific activities within the workshops. Because the CBAM revealed that the attitudes of regular teachers were more negative than anticipated toward mainstreaming handicapped children, a session covering attitudes was included. In addition, a seventh optional workshop on materials development was added because of the need expressed by many teachers.

After the workshop training, teachers and principals participating in the project were assisted in their own schools on an individual basis to work with handicapped children. Part of this assistance included identifying specific educational needs of the handicapped children who were assigned to each teacher's classroom and helping the teacher to meet individual student needs in concrete, practical ways. Thus, during the practicum phase of the training, the project trainers identified the training needs of the individual teachers they assisted by focusing on the needs of handicapped children.

As is evident from the description, training needs of participants in the project were continually being assessed. At the end of the project year, all participants responded again to the original questionnaires. Pretest and posttest results were compared and served as a major part of the evaluation of how well the project met the needs of participants.

Interviews with teachers and principals who had completed the training program revealed that negative attitudes staff had held about mainstreaming prior to training were generally eliminated. Teachers felt that they were able to work with handicapped children in their classrooms because the training they received was practical. They had learned about materials and techniques that helped them work with specific children. Much of the success of this project must be credited to the project staff for assessing training needs accurately and designing appropriate training to meet those needs.

Regular Education Inservice Project, Reidsville, NC

The Reidsville City School System was concerned about inservice education for regular classroom teachers because of the large number of teachers who had little preservice education for working with handicapped children. Teachers working in the system were expressing needs for inservice education and direct classroom support to educate handicapped children appropriately as required by state and federal law. The school system also observed needs for better inter-staff relations and increased parental and community involvement in the education of handicapped children.

The leadership team for the project included the project director, who is a general educator on the central administrative staff, and the Special Education Cadre, composed of seven special educators who were based in the schools participating in the project. One of the first issues addressed by the team was the importance of obtaining data concerning the specific needs of those who would participate in the inservice education.

The planning team decided to modify and adapt for local use an existing needs assessment instrument to identify the individual needs of each participant. The instrument, provided by the Division of Exceptional Children, NC Department of Public Instruction, was developed originally for assessing the attitudes, knowledge, and skills of members of school based committees (which included regular educators). The instrument categories were reordered and the language reworked to clarify and reflect the vocabulary in use among regular educators in Reidsville. Some items were deleted and others added to establish a match between the instrument and the procedures followed in the school system in regard to identifying, referring, assessing, and serving handicapped youngsters.

Within the first few days of the school year, the assessment instrument was administered in each school by the teacher who was a member of the Special Education Cadre. All members of the Cadre were thoroughly familiar with the language of the instrument, knew how to introduce the instrument, and knew how to respond consistently to questions about the nature and intent of the instrument. Teachers and administrators were asked to take time to conscientiously fill out the questionnaire, since their individual responses would dictate their individualized inservice activities.

Within two weeks the Cadre prepared individual profiles which expressed each person's needs in percentages in every category of assessment. At each school, a member of the Cadre sat down and went over the profile with each respondent. Respondents were asked to study the profiles and, in light of their percentages of need, to prioritize their needs for inservice.

The project director aggregated individual responses and produced a ranking of needs for each school and for the system. These data were presented to the superintendent, director of instruction, director of exceptional programs, and principals, so that there would be a system wide base of support for the subsequent programing effort.

Individual priorities for inservice education were matched across the system and a master schedule of topics for workshops was drawn up. Nine sessions (coinciding with the existing released-time inservice program in operation in the system) were tentatively planned. Contracts were let to consultants who could address the identified topics. Scheduling was not locked in for all nine sessions because the Cadre felt there should be room for adjustment. For example, regular educators might wish to pursue an area of education for more than one session or educators might feel that as the year progressed their needs changed. Flexibility enhanced the credibility of the program, although it increased the work of the Cadre.

The inservice program provided workshops on 18 separate topics. Most topics were repeated in order to accommodate the large number of requests for each topic. Several topics were scheduled to continue over a number of sessions in order to provide indepth study. The evaluation indicated that educators felt the program had met their needs. About 82% of the trainees rated the overall success of the program as above average.

Project SERC (Special Education in the Regular Classroom), Morgantown, WV

Project SERC was designed to introduce Public Law 94-142 and to provide information about working with mildly disabled learners to regular classroom teachers. Even though workshop sessions were planned prior to meeting with the teachers, the project staff, through a close association with the public schools, were aware of many of the concerns of regular classroom teachers. Because they were unsure of the specific needs of these teachers, several forms of needs assessment were designed to provide an initial and ongoing assessment of specific training needs in order that adjustments could be made in the training program.

At the time the first training workshop was held, teachers were asked to respond to three instruments designed to help individual teachers and project staff identify areas in which teachers may need training. One instrument was an attitude test, designed to assess teacher attitudes about handicapped children and appropriate methods of working with particular handicapped children in the classroom. A second instrument was a special education information test which measured teachers' knowledge about general special education concepts and laws affecting special education. The third instrument used was an adaptation of the Q Sort, which determines how individuals presently perceive themselves on a specific item (real score) and how they would like to be on that item (ideal score). The discrepancies between the real and the ideal scores assist trainers to see what people want to change. The training can then be designed or modified to meet these needs.

In addition to these three instruments used for initial needs assessment, project staff have also used the nominal group technique to identify and prioritize training needs. This technique divides participants into small groups to identify training needs individually in writing, to list the needs on a chart or board for group discussion, and to reach a consensus on priorities. (A complete description of this technique is found in Chapter 3.)

As the training program progresses, the trainers assess needs in other ways. One is through personal contacts and meetings with teachers and principals that serve to identify problem areas that training may be designed to alleviate. Another is through the use by project staff of a contact sheet, which is a record of classroom observations of the teachers participating in the inservice program. The contact sheet shows the date and amount of time a teacher was observed working toward the competencies addressed by Project SERC. A review of the contact sheets indicates those competencies that the trainees are emphasizing and also indicates areas of possible weakness in the SERC training program. The training program can then be adapted to meet these identified concerns.

As a final assessment of needs and effectiveness of the training, the initial three instruments (attitude test, special education information test, and the Q Sort) are readministered to the project participants. The pretest and posttest results are compared to show changes in attitudes and knowledge and to determine if trainees' real perceptions of themselves as measured by the Q Sort move closer to the ideal they would like to achieve.

Model Program for Personnel Preparation in Secondary Schools, Pittsburgh, PA

A concern for providing inservice training for secondary education personnel in the Pittsburgh Public Schools led to the development of the Model Program for Personnel Preparation in Secondary Schools. In one component of the Model Program, inservice education is provided for all secondary special education teachers in the Pittsburgh Public Schools. A series of workshops is offered throughout the school year. The needs assessment techniques used for identifying workshop topics have evolved during the first two years of the project. In 1978, questionnaires were used at the start of the project to determine the needs to be addressed by the workshops. However, the project staff felt that from using this technique alone, they did not have adequate information. For the 1979-1980 school year, an informal social event was held to discuss training needs. These needs, combined with needs noted by supervisors and project staff, were used as a basis for planning fall workshops the second year. In the spring of 1980, project staff refined their needs assessment procedure once again. The first workshop held in the spring served as a planning session for future workshops. A group process technique similar to brainstorming was developed to identify and prioritize needs. (See Appendix C for a description of this technique.)

Another component of this inservice program was designed to train a group of special education resource teachers to serve as trainers of regular education teachers within each high school. The resource teachers were trained to identify the needs of the teachers in their building and to provide training and individualized assistance as needed.

At the beginning of the school year the project staff assisted the resource teachers with the development of a questionnaire which was administered to teachers to identify training topics. The questionnaire served as a vehicle for the resource teachers to initiate a personal discussion with teachers to determine their interest in the particular workshop training topics. Based on the questionnaires and followup interviews, the resource teachers then planned several workshops for teachers in the particular school.

Needs assessment was continued throughout the school year in a variety of ways. At the end of each workshop, the evaluation procedure provided an opportunity to solicit ideas for future workshops. This was followed by the resource teacher contacting each teacher personally to see if the workshop had met his or her needs. The resource teacher, who was located in the building, noted problems and issues that arose in the building. Meetings of department chairpersons were also used to identify training needs. In addition, project staff, who visited many of the schools, were able to help resource teachers clarify workshop topics and goals. The resource teachers met periodically as a group to share problems and discuss training needs of regular classroom teachers.

The training program which emerged was flexible and based on the needs of teachers in each building. The workshops addressed topics concerned with individualizing lessons, solving behavior problems, using and modifying media and materials for handicapped students in the regular classroom; and referring students to special programs. The resource teachers followed up the workshop by helping interested teachers apply the information from the session to their classroom.

General Observations Based on Projects' Experiences

As a result of site visiting these four inservice programs, much has been observed that will assist others in planning effective needs assessment. Project directors, school administrators, and teachers who participated in the needs assessment were all very helpful in identifying practices worthy of replication. They also shared experiences that will assist others to avoid potential problem situations.

The Pittsburgh program is an interesting example of how the project staff have experimented with various needs assessment techniques and have continously revised and improved their needs assessment procedures. From their experience, they have discovered that when teachers did not feel that their responses to surveys would influence the training being offered, they provided very little information about their needs. Once teachers discovered, however, that the trainers actually listened to their concerns and planned workshops to meet their needs, they were much more cooperative in providing information about needs. Flexibility in operating the program was also found to be important. This means listening to teachers, respecting their views, and making changes in the training program to meet their expressed needs.

Project staff in Reidsville, North Carolina report that while teachers did respond conscientiously to the needs assessment instrument, they did not really expect to have training sessions developed that would address their assessed needs. This resulted in most participants being pleasantly surprised, but a few felt they had been trapped through their own action. They felt that their honest answers to the needs assessment questionnaire had resulted in their being assigned to topics that they were not interested in learning more about. However, most participants felt that they had benefited from being able to determine their own needs and appreciated knowing that their perceptions were considered important.

The value of disseminating needs assessment findings to the training recipients, as well as to others who have an interest in the training program, was stressed by the Reidsville staff. This has been helpful in building support for the released time inservice training program.

In Morgantown, West Virginia, Project SERC staff chose to develop several of the needs assessment instruments that were used in order to have valid measures of the broad concerns that the project was designed to address. They also adapted or modified available instruments or techniques to fit their project's needs. They pointed out that persons with expertise in developing and modifying instruments should be available to ensure that the instruments are carefully designed to be valid measuring devices.

Project SERC staff stress the importance of involving training participants in the needs assessment and believe that needs assessment should be a continuous process. Flexibility and willingness to modify the program as needs indicate are crucial to a successful inservice training program.

Interviews with teachers and principals who participated in the inservice program in Texas revealed the importance of meeting the specific needs of teachers for working with particular handicapped children in their classrooms. They felt prepared for their individual teaching situations because the training met specific as well as general needs. The project staff were able to accomplish this by gathering data about needs from several different sources, including the children with whom these teachers were working in their classrooms.

Summary of Good Practices in Needs Assessment

As a result of observing needs assessment in action, the Task Force has identified a number of good practices. These are summarized as follows:

1. Needs assessment should be an ongoing process. As trainees become more knowledgeable about the topic, their awareness of their needs changes. Most of these training programs continually reassessed participants' needs.

2. Continual reassessment of needs requires flexibility in program design. If emerging needs are identified during the implementation of the training, the program should be able to adapt to meet these needs.

3. There must be a visible relationship between the needs assessment and the program delivery. Conducting a needs assessment leads people to expect that training will be developed to meet those needs.

4. Trainees' own perceptions about their needs must be viewed as important. Participants should be involved in planning the needs assessment, prioritizing needs, and program decision making.

5. Needs assessment information should be gathered from more than one source, using different needs assessment data collection techniques. This results in a more comprehensive identification of needs than can be accomplished using a single source of data or a single technique.

6. Valid and reliable data collection techniques must be used. Trainees will be more willing to accept the results of the needs assessment if they perceive that the assessment strategies used are valid and reliable methods of gathering data.

7. Needs assessment techniques should be used that identify individual as well as group needs. Teachers tend to be more enthusiastic about training that assists them with their specific needs for working with children in their classrooms.

8. Information gathered about training needs should be disseminated to those people who participated in the needs assessment and to other audiences who may have an interest in it (e.g., the community and school board members). This helps to establish credibility for the inservice program which is developed.

The above good practices are based on the assumption that the primary purpose of conducting a needs assessment is to gather information for developing an effective inservice education program. While there are a number of other purposes of needs assessment in education, these program descriptions demonstrate how needs assessment is being conducted and used by inservice planners and providers at the local education agency level.

Reference

Hall, G. E., & Rutherford, W. L. Measuring stages of concern about the innovation: A manual for use of the SOC questionnaire. Austin: University of Texas, 1979.

Chapter 5

CRITICAL ISSUES AND PERSISTENT PROBLEMS

Philip H. Mann

Needs assessment can be defined as a process by which a perceived and/or real need, if responded to, would improve the performance of the individual in the particular area of concern. One of the problems associated with needs assessment is differentiating between perceived and real needs. There is often a great deal of overlap between the two concepts. Indeed, they are often in juxtaposition.

Perceived needs are sometimes misconstrued as real needs, particularly when viewed within the frame of reference of potential for impact on handicapped students in schools. For example, a teacher may indicate a need for training in the different categories of special education (perceived need) when what he or she really needs is more information and strategies regarding classroom management (real need). Another example is the need by regular classroom teachers for information designed to aid them to improve their response to students in keeping with the least restrictive environment imperative. In response to this need, groups of teachers have been convened who then proceed to ventilate their feelings about the need for mainstreaming. While the ventialtion of feelings may be important and may address certain emotional needs, this kind of activity may not satisfy the real needs that will enable the teachers to solve problems. They may need to develop good coping behaviors as well as identify instructional alternatives that can be used for students with special needs.

While needs assessment is for the most part a problem solving process, it should be more than just a process by which we attempt to solve problems. It is also a problem emerging process. In reality, however, most individuals refuse to respond to emerging issues. It is safer to "hang back" and drag your feet until the problem goes away or becomes so critical and the need is so great that you will accept any kind of help from any source. The implementation phase of Public Law 94-142 is a good example of this phenomenon. It seems that the solving of problems in schools today as related to needs is, for the most part, predicated on experiencing the problem itself (i.e., teachers are assigned students with behavior problems first, then they learn how to deal with the problems). Anticipation of needs, based on an analysis of the natural consequences of events and behavior, should prevent most of the unhappiness that goes along with trying to deal with problem behavior without adequate preparation. Good needs assessment should pinpoint specific deficiencies or problem areas, help identify resources, and provide direction to the planning process.

Collaborative Planning

An important issue in needs assessment is the area of collaborative planning. While planning is often viewed as a problem area in terms of time, resources, and personnel, it nevertheless provides the process by which validated problems can be prioritized according to the perceptions of their importance by the individuals involved. Planning should have the broad based involvement of administrators, teachers, and community members for maximum effectiveness. Good planning provides a means for delineating procedures as well as allowing for the development of a systematic and substantive structure for monitoring needs assessment activities. It is important to establish communication at the beginning and plan for its continuation throughout the process as well as to achieve a commitment from the group in terms of their own responsibilities and products.

Both the institutions of higher education and local school districts approach planning activities in a variety of ways. Some planning activities are initiated on the basis of the development of goals and objectives. Others deal with planning activities as a response to crises or critical situations. Still others use planning as a means of mandating needs assessment as part of the criteria for selection and approval of program elements. School systems have to be chary of needs assessment models that are too complex and difficult to implement. Many individuals are disappointed because of over-expectation of what these models can deliver. Products of such efforts are often superfluous to the desired goals, while the processes involved are often too expensive, too time consuming, or both to be practical. A caveat to those who are responsible for needs assessment is to be careful about what you promise to deliver.

Planning through multiple input sometimes presents hurdles to be overcome. There is usually someone who expresses concern about the amount of time that such a process will take, the efficiency of the procedures, how to deal with power brokers with vested interests, as well as the overall value of the product. It is axiomatic that this is where leadership is important. Individuals trained in group process procedures should be involved as chairpersons of needs assessment committees. Having trained individuals assume leadership roles could maximize the benefits to be obtained from the collaborative planning process.

Another issue is the identification of the power brokers (i.e., the individuals we have to deal with in terms of achieving desired goals in needs assessment). Gaining support and assuaging fears are important problem areas to be dealt with as we develop the content and procedures involved in needs assessment. The following constituent groups need to be considered.

Administrators

Administrative personnel have traditionally been called upon to plan inservice training. It has been assumed that they have identified the competency needs of the teachers in their determinations. In a study of attitudes toward mainstreaming, Mandell and Strain (1978) found that the attitudes of 50 principals about the needs of teachers were not related to the attitudes of randomly selected teachers in their schools in regard to the teachers' own perceived needs. Further research appears warranted concerning methods by which convergence can be accomplished in teachers' and administrators' judgments of need. Too often, administrators at the school building level have become accustomed to perceiving "need" in relation to emergencies or immediate demands from pressure groups, without determining the relationship of the part (the particular need) to the whole (the overall need) in terms of total school benefit.

In the local setting, it is usually the principal who is ultimately charged with the responsibility for justifying needs and coordinating needs assessment procedures, whether they are collaboratively developed or whether they are derived from pressures applied by special interest groups. A certain amount of independent administrator assessment is necessary in order to substantiate needs as well as requests for training activities and/or funds.

Community

The public schools are experiencing a serious threat to the financial support of their programs and staffing. Parents and community members who pay taxes are generally not informed of existing training needs. Their lack of knowledge in this area sometimes creates a conflict between their priorities and those of the school district in terms of school goals and emphases.

Community backing for inservice training is important from a financial support perspective, as well as for supporting the implementation of any programmatic changes that will be an effect of the training itself. Community members should be involved in the identification of school priorities in areas dealing with training. Involvement of community in planning for staff development can result in the following outcomes:

1. Communications among the different arenas of the school and community can be improved.

2. The level of awareness of the community concerning new programs can be extended, particularly in areas related to concerns about concomitant training needs.

3. The community members will feel that they have had input and opportunities to offer suggestions for direction to local boards of education.

4. The interest level of community members may be increased, encouraging them to be more supportive for future training activities.

Community members should be involved early in the problem identification stage of planning. Community awareness of program and procedures can be accomplished in different ways. Meetings can be called which bring community members and educators together. The composition of the groups can include good representation of parents and community members. Information can be exchanged through forums as well as through formal presentations. Programs should be fully explained and community members should have the opportunity to react to proposed training concerns and be able to ask questions. Although members of the community may not agree with educators as to priority areas of training, the important thing is to allow for the discussion of divergent views.

Teachers

The mainstreaming of students with special needs into regular classrooms has led to consideration of the skills and competencies needed by teachers to effectively teach these students. It has become apparent that comprehensive needs assessment is needed so that appropriate inservice training can be developed that will serve as a vehicle through which educators can learn these additional skills (Mann, 1978). The specific content of training sessions or activities has therefore become an important issue. National (Monaco & Chiappetta, 1978; Rude, 1978) and statewide (Redden & Blackhurst, 1978) investigations of topics and priorities for inservice training have resulted in lists of topics and overall ratings of priorities.

It has been stated that effective and successful training programs are more likely to result when training is directed toward the specific needs of the training recipients themselves (Hentschel, 1977; King, Hayes, & Newman, 1977; Rude, 1978). If the teachers involved in inservice training, for example, do not themselves feel a need or desire to change, the content of the sessions will not be assimilated. Discussions of the "politics" of this situation have been presented by Pine and Boy (1975); Mann (1978); Lewis (1978); and Dyer (1978).

Planning with those who will be directly responsible for the education of students is of primary importance. Teachers should play a role as arbiters within the planning process of their own education. Needs assessment should be nonthreatening and of the kind that is deemed worthwhile and relevant to the teacher's role in the school. Educators as a group are beginning to accept more responsibility for their own self improvement. The Rand study in 1978 indicated that regardless of how innovative a program is, unless the individuals involved in the program are also part of the decision making process, i.e., needs assessment, minimal benefits will be accrued in terms of implementing the new practices learned (Berman & McLaughlin, 1978).

Needs assessment that will ultimately result in the kind of training that will affect participants' learning on a career long basis appears to be more favorably received than fragmented requests that are designed to address a narrow and immediate area of concern. Another important consideration in planning for needs assessment with teachers is to be aware of the demands that are already being made on their time. Needs assessment is a sensitive area and teachers who are constrained by time factors may not be as cooperative on some occasions as they could be on others that are more convenient.

Credibility

One of the persistent problems to be resolved is the whole question of who does the needs assessment. Wherever needs assessment is conducted exclusively as an inside or internal process, individuals will be accused of losing impartiality. This may or may not be true. It is debatable as to whether needs assessment conducted from the outside by external consultants can be said to be any more free from impartial judgment. Consultants have their own biases and sometimes lose their impartiality because they get caught up in the emotions, goals, and motives of those who retain them or who are in authority. By the same token, it is difficult to state categorically that using outside consultants for needs assessment will sacrifice relevance and usefulness. Outside consultants who have developed effective, time-tested, and validated instruments and techniques for doing needs assessment, may provide more relevant and useful data than the local director of research and evaluation who has neither the time nor the inclination to get involved in planning and implementing a comprehensive needs assessment program.

Externally conducted needs assessment has been said to be more expensive. This depends on how we define the term expensive. Mediocre internal needs assessment that results in needless expenditure of funds, may be more expensive in the final analysis than one that is implemented through good external consultative direction. One must beware of unsupportable perceptions and guided by a careful analysis of resources and successful procedures in determining the best way to proceed. The key factor lies in the planning process where democratic principles and good judgment prevail as opposed to unilateral decision making. It is mainly a matter of matching the needs assessment with the problem that needs to be addressed. All potential contributors (internal and external) should have an opportunity to present their case (within budgetary constraints) on a competitive basis in keeping with the parameters of specified criteria. Selection of a design should be based on a consensus of perceived value and its potential for responding to the problem. The problem solving process should not be hurried by crisis situations or proposal deadlines. Sometimes a period of incubation is necessary before final decisions are made.

Program Justification

Agencies that distribute funds invariably require an explanation of need. If funds are going to be requested for training teachers, it would appear that the system requesting the funds should justify the need through some kind of needs assessment of the population to be served. It is not unreasonable to expect individuals to explain the rationale behind stated objectives. The rationale for the training component should be based on some form of needs assessment.

One of the more pervasive problems seems to be to try to get individuals who prepare proposals to do the needs assessment prior to formal submission to the funding agency. Often funds are requested by individuals who indicate that they are going to spend the first period of the project trying to find out what it is that teachers need in terms of training. A case in point is the request for funds for training regular teachers in the various aspects of P.L. 94-142 and then spending the first three months of funding trying to find out what these teachers already know about P.L. 94-142 as well as what they need to know. Somehow, the ways in which the results of needs assessment are to be utilized gets lost in the rhetoric of procedures. Precise statements of linkage should be made about how the needs assessment will eventually lead to improvement in the recipients, the school, the system, and in the final analysis the children who will receive improved services that will reflect the type of training given their instructors.

Conclusions

Needs assessment is probably one of the most critical steps needed for making the kinds of decisions that will ultimately affect the goals and objectives that are to be achieved. The guideword in the entire process is trust. Trust must evolve within the procedures that are instituted. It has to be a permeating condition of needs assessment, so that concerns over time, perceived value, resources, and how needs assessment information will be used will not be viewed out of proportion. Educators for the most part recognize the need for renewal. A personalized approach to needs assessments is a way of establishing trust and soliciting input relating to individual goals. This approach may be slower but it may result in more appropriate decisions being made about the kind of training which will directly benefit the participants as well as the students in the schools.

References

Berman, P., & McLaughlin, M. W. Federal programs supporting educational change: Implementing and sustaining innovations. (Vol. 3) Prepared for the US Office of Education, Department of Health, Education and Welfare. R-1589/8-HEW. Santa Monica CA: Rand, 1978.

Dyer, E. R. The change syndrome in education. Peabody Journal of Education, 1978, 55, 184-192.

Hentschel, D. Change theory applied to inservice education. Planning and Changing, 1977, 8 (2), 103-114.

King, J. C., Hayes, P. C., & Newman, I. Some requirements for successful inservice education. Phi Delta Kappan, 1977, 58 (9), 686-687.

Lewis, F. C. The Lewis self-evaluation scale. Phi Delta Kappan, 1978, 59, 686-690.

Mandell, C. J., & Strain, P. S. An analysis of factors related to the attitudes of regular classroom teachers toward mainstreaming mildly handicapped children. Contemporary Educational Psychology, 1978, 3, 154-162.

Mann, P. H. Training teachers to work with the handicapped. The National Elementary Principal, 1978, 58, 14-20.

Monaco, T. M., & Chiappetta, E. L. Identifying competencies for mainstreaming teachers through the perceptions of state directors of special education. Education, 1978, 99, 59-63.

Pine, C. J., & Boy, A. V. Evaluating teachers. NASSP Bulletin, 1975, 59 (395), 18-23.

Redden, M. R., & Blackhurst, A. E. Mainstreaming competency specifications for elementary teachers. Exceptional Children, 1978, 44 (8), 615-617.

Rude, C. R. Trends and priorities in inservice training. Exceptional Children, 1978, 45 (3), 172-176.

Chapter 6

BENEFITS OF EFFECTIVE NEEDS ASSESSMENT

Martha Walker

Though inservice education may have suffered from poorly conceived or nonexistent needs assessment, it remains a potential vehicle of communication and visibility within the educational world. George Kuh, in Chapter 2 of this monograph, has described needs assessment as an art rapidly evolving to become an effective education tool. The more knowledgeable we become in the application of a needs assessment process within specific educational settings, the more aware we become of how much more there is to learn about its use in different settings. Chapters 3 and 4 reflect the development of our knowledge about needs assessment and describe the steps toward making it a craft. This monograph has dealt with a specific educational setting: inservice education. By understanding the range of possible training needs of teachers of handicapped children within regular classrooms, the relevance and use of inservice education is increased. This increased capacity to identify need can be generalized to any inservice area. This craft can affect the education of all children, though it was evolved through the acute need of regular teachers of handicapped children.

Bronfenbrenner (1977, 1979) has long been the proponent of considering the environments within which problems are nested. He has described the ecology of research that attends to multiple causes of problem situations and calls for analysis at each environmental level. A benefit of effective needs assessment for inservice education is the clarification of the environments in which the teacher and the student with a disability operate and the necessity for determining need at every environmental level. This understanding prevents us from making curative claims for inservice education as the answer to integration of handicapped children in our society. This probe into understanding the educational needs of teachers points the way for additional efforts in other educational settings.

What are these settings or environments? Bronfenbrenner has described three levels of analysis for understanding human behavior: the micro-system (a small unit of individuals, a setting where problem behavior occurs); the exo-system (all influences outside the micro-system that affect that setting by providing or limiting the supply of goods and services); and the macro-system (the beliefs and values of the culture out of which the exo-system and micro-system grow).

Belsky (1980) has added a further unit of analysis for consideration: the ontogeny of individuals within the micro-system. The teacher is a product of the past, including exposure to handicapped children, familial attitudes toward disability, and knowledge of handicapping conditions. The student is also behaving in learned patterns, perhaps evoking abuse or neglect by portraying a "sick role" or reaping secondary gains from being "different." The interaction of the two principals, teacher and student, and their unique histories is surely a source of variance in the educational experience. Inservice education would have to be based on historical determinants and their effect on teacher and learner needs to acknowledge the importance of this individual level of analysis.

This monograph has concerned itself wholly with the micro-system, the setting (classroom) in which dysfunctional or discrepant behavior occurs. The intervention of inservice education has been stressed as a valuable avenue for developing teacher knowledge and skills for inclusion of handicapped children in the regular classroom. The art of needs assessment in this setting seems to approach a craft. Process, strategies, and instruments have been developed for use with an acceptable prediction of effectiveness. Lest we become overly optimistic in gauging the impact of this intervention, the systems within which the classroom exists should be described.

FIGURE 1

ECOLOGY OF THE CLASSROOM

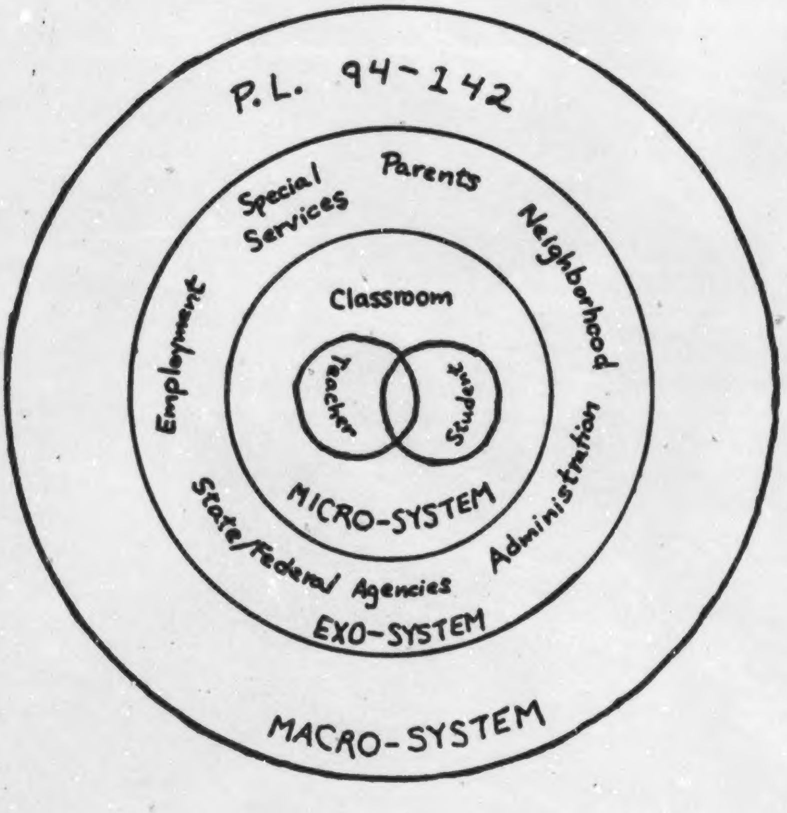
P.L. 94-142
Special Services
Parents
Neighborhood
Employment
Classroom
Teacher
Student
MICRO-SYSTEM
Administration
State/Federal Agencies
EXO-SYSTEM
MACRO-SYSTEM

Figure 1 shows the ecology of the classroom (micro-system). Impinging upon the classroom are other forces (exo-system) such as special services, local board of education, state board of education, administration, parents, state/federal agencies, neighborhoods, employment situation. All of these forces affect the goods and services available to the classroom teacher in an effort to provide the least restrictive environment for the education of handicapped children. What tools of needs assessment can be developed to improve this support system? Linkage between the micro-system and exo-system is often tenuous, possibly because need has not been explicated and articulation of responsibility and/or relationship is, therefore, impossible.

Both the micro-system and the exo-system are embedded within the macro-system, the fabric of cultural beliefs and values underlying classroom and community behaviors. The formal valuing of handicapped individuals implied in Public Law 94-142 and rehabilitative legislation is contradicted by informal societal beliefs evident in architectural, societal, and employment barriers. Handicapped individuals are devalued in practice, though the legislature has entitled them access to education, independent living, and employment. What societal need does this discrepancy reflect? The art of needs assessment has the macro-system as a new frontier.

Through the study of this monograph, you have investigated needs assessment as a way to intervene deliberately in the skill development of classroom teachers. This final discussion of the complexity of the problem of mainstreaming as viewed ecologically is offered to suggest where your intervention occurs in the larger perspective of change. Societal values are not changed quickly, and the exo-system and macro-system must be kept in mind if the beginning needs assessor is not to be frustrated. The benefit of establishing such a beachhead in the micro-system is the ripple effect that understanding need and the process of needs assessment can have at all levels of analysis. A change at the micro-system level will affect the exo-system and the macro-system eventually. There is much yet to be known about community and societal need, but the effort to further develop the tool of needs assessment for application beyond the micro-system is justified by anticipated benefits. This monograph has described current best practices as a first step toward wider applications. Increased local capacity to conduct needs assessment for inservice education programs improves our chances of solving the problem of mainstreaming all those that will follow in the future.

References

Belsky, J. Child maltreatment. American Psychologist, 1980, 35, 320-335.

Bronfenbrenner, U. Toward an experimental ecology of human development. American Psychologist, 1977, 32, 513-531.

Bronfenbrenner, U. The ecology of human development. Cambridge MA: Harvard University Press, 1979.

Appendix A

Guidelines and Criteria for Constructing Questionnaries

62

GUIDELINES AND CRITERIA FOR CONSTRUCTING QUESTIONNAIRES

A. Title should

1. Reflect the content of the instrument.
2. Be concise.
3. Be written in language easily understood by the respondents.

B. Introductory statement should

1. Include a brief summary of the instrument's purpose.
2. Include an appropriate statement concerning the respondents' confidentiality.
3. Include a motivator for the respondent.
4. Use language which is appropriate to the level of the respondents.

C. Directions should

1. Be complete, unambiguous, and concise.
2. Be at a language level appropriate to the respondents.
3. Tell the respondent how to dispose of the instrument once (s)he has completed it.
4. Specify how accompanying answer sheets should be filled out.
5. Instruct the respondent how to deal with items which are not applicable.
6. Specify the approximate amount of time required to complete the instrument.

D. Demographic section should

1. Be limited to only those variables that will be used to answer specific questions.
2. Portray the relationship of the respondent to the object of measurement.
3. Make certain items optional.
4. Use language appropriate to the language level of the respondents.

E. Writing Items

1. Rating scale.
    a. The stem of rating scale items should be written unidimensionally.
    b. The response sets to rating scales should be written unidimensionally.
    c. The response set of a rating scale should be logically tied to the stem.
    d. The level of specificity of the stem item should be specific to the user's needs.
    e. The rating scale item should be used only when no more direct method is available.
    f. Directions for how to use any specific type of rating scale should be included, along with appropriate examples.
    g. The language used in rating scale stems and responses should be appropriate to the level of the respondent.
    h. The type of rating scale format selected should be easily understood by all of the respondents.

i. Rating scale items should be written so as not to elicit biased responses.
j. The response sets for rating scale should all be written in the same direction.
k. Avoid using global terms in response sets.
l. Rating scales should include from three to seven categories.
m. Allow for a "not applicable" response when appropriate.
n. Analyzing the results of rating scales.

2. Qualitative selection items.
    a. The stem and responses should be stated clearly and unambiguously.
    b. The language should be appropriate to the respondents.
    c. The stem should be stated unidimensionally.
    d. The response set should be exhaustive.
    e. The response categories should be mutually exclusive.
    f. Directions should be supplied for difficult items.

3. Supply items.
    a. In writing fill-in-supply type items, appropriate units should be specified wherever possible.
    b. Sufficient space for responses should be provided.

F. Structure and Format

1. Items should be grouped according to item types or similarity of content.
2. Group items within sections according to ease with which they can be answered.
3. Length of the instrument should be related to respondents and purpose.
4. The instrument should be clearly reproduced.

Source: Adapted from Covert, R. Guidelines and criteria for constructing questionnaires. Charlottesville: University of Virginia, Evaluation Training Consortium, 1977. (Unpublished paper.)

Appendix B

Regular Education Inservice Training Checklist

Region XIX Education Service Center

El Paso, Texas

REGULAR EDUCATION INSERVICE TRAINING CHECKLIST

NAME____________________________________ SCHOOL____________________________

POSITION__________________________

Rate on a scale of 1 to 5: 1 = least competent 5 = highly competent Circle response.

I. CAN YOU:

A. Provide information about the "Education for All Handicapped Children Act"	1 2 3 4 5
B. Discuss the (Texas) State Plan	1 2 3 4 5
C. Demonstrate knowledge of the local plan relating to education of handicapped children	1 2 3 4 5

II. CAN YOU:

Define and relate knowledge of the following handicaps:

A. Auditory Impaired	1 2 3 4 5
B. Speech Handicapped	1 2 3 4 5
C. Emotionally Disturbed	1 2 3 4 5
D. Language/Learning Disabilities	1 2 3 4 5
E. Mild/Moderate Mentally Retarded	1 2 3 4 5
F. Orthopedically Handicapped	1 2 3 4 5
G. Visually Handicapped	1 2 3 4 5

III. CAN YOU:

A. Utilize knowledge of formal standardized tests and interpret information from these tests	1 2 3 4 5
B. Read the results of these tests	1 2 3 4 5
C. Select assessment techniques to be used with various handicapping conditions	1 2 3 4 5

IV. CAN YOU:

A. Define an I.E.P. (Individualized Education Program)	1 2 3 4 5
B. Explain what an I.E.P. must contain according to law	1 2 3 4 5
C. State long term goals in terms of learner behavior	1 2 3 4 5
D. State short term objectives in terms of learner behavior	1 2 3 4 5
E. Plan and implement an I.E.P. for a handicapped learner in a regular classroom	1 2 3 4 5

V. CAN YOU:

A. Name personnel in your school system with whom you can work as a team for the handicapped in your room	1 2 3 4 5
B. Individualize instruction to meet the needs of the handicapped student in the regular classroom	1 2 3 4 5
C. Locate, select, and prepare instructional resources for the handicapped	1 2 3 4 5

VI. CAN YOU:

A. Evaluate the progress of the handicapped learner	1 2 3 4 5
B. Demonstrate skill in updating necessary goals to meet the needs of the learner	1 2 3 4 5

Appendix C

Needs Assessment Meeting
(A Group Process Technique)

Pittsburgh Model Program for
Personnel Preparation in Secondary Schools

Pittsburgh, Pennsylvania

2. Leader asks participants to decide on first topic to be covered at next meeting

    a. Vote - majority rule
    b. Consensus among all
    c. Other

3. Decisions can be facilitated by leader -- (s)he can point out the way different topics may be linked together or sequenced so that participants can have many of topics addressed/needs met

IV. Assigning Responsibilities

A. For topic

1. Leader asks participants how topic selected might be addressed

    a. Leader solicits suggestions from participants
    b. Leader offers suggestions to participants

2. Leader can list all suggestions -- who, how, when, where

3. Decision making procedure described above can be utilized here

4. Leader summarizes/clarifies decision for participant (this can be also shared in follow up memo to participants)

B. For next meeting

1. Leader clarifies when, where next meeting will be held
2. Leader makes arrangements for room with supervisor